



# NEWS LETTER



Merry Christmas

To All

**DECEMBER**

**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.

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312 Mt. Pleasant St., Fall River, Mass.

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

December, 1934

Vol. 6, No. 12

**A Very Merry Christmas to All of You!**

We wish at this time to extend our thanks to any and all of our friends who have contributed in any way to the NEWSLETTER this past year. Our paper is largely due to the efforts of many people, all interested in the game of Golf, either as greenkeepers, experiment men, advertisers, or others. In the make up of the last twelve issues, many have helped; to each and every one we express our appreciation, and the wish that they will continue with their interest and help.

To our members we wish at this time to express the wish that each one will make a real effort to be present at the annual meeting. At this meeting much of interest to every member will be reported by the various officers and committees. The affairs of the past year and plans for the coming season will be discussed. There will be an interesting speaker. Come and enjoy yourself!

The Business Manager reports that space is rapidly being sold for the 1935 NEWSLETTER. Any advertiser who has not contracted for space should do so at once.

We will be interested in receiving articles from any of our members and others who may care to contribute, and thus lessen the load of your Editor.

The great interest shown in the various plans for John Shanahan Memorials, not only by our own members, but also

by so many others outside the club, is a great indication of the great esteem in which John was held.

The Recreation Conference for 1935 at the Mass. State College will be held on March 15-16-17. Bigger and better than ever; govern your plans accordingly!

Elected to membership at the December meeting were Philip Porter of East Northfield, Joseph Conway of Agawam Hunt, and Nicholas Bruno of Norfolk, the latter two as Associate Members. There is probably a prospective member near you, point out to him the advantages of joining your club.

Recommendations for lawns hard hit by the heat and drought during the past season, as given by B. J. Firkins of the Iowa State College for Iowa conditions this Fall, were for unshaded conditions, a seed mixture of 2 parts Kentucky bluegrass, 1 part redtop, and 1 part Dutch white clover; on shaded areas, largely the same mixture, with poa trivialis replacing the Dutch white clover.

We have recently learned that Mrs. E. E. Pattison, whom most of our readers remember as the Director of the International Seed Service, is now located in Moscow, where she represents many American firms in Russia.

We understand that the New England Toro Co. are sending out a very fine calendar for 1935, and that anyone not getting theirs by Xmas may have one by writing in for it.

An interesting suggestion for next Spring is a proposed trip to Milford, Conn. to examine the grass plots with experiments being conducted by the F. H. Woodruff & Sons. A joint meet-with the Conn. Assoc. might be arranged there. What is your reaction?

## DECEMBER MEETING

The December meeting was held at the Hotel Statler, Boston, on December 3rd. The speaker was Prof. H. F. A. North of the Rhode Island State College. Prof. North spoke on "Destructive Insects on the Golf Course, Their Habits and Control".

The speaker pointed out that they had been forced to make a study of the web worm, because their plots had been so severely infested.

Earthworms are worse in Spring and Fall, more serious in soils neutral or nearly so, worse in soils well supplied with organic matter. The use of Sulphate of ammonia tends to control them, and there is also a difference in the kind of grass. There may even be too many earthworms in fairways. An experiment conducted at Misquamicut had good control with five pounds of arsenate of lead to a thousand square feet of area. Seven and one half and ten pounds to same area also gave good control.

Ants are the hardest pests to control. May be killed by gas, contact poisons, or stomach poisons. Antube gave the best results this past season.

Cut worms are sometimes serious, one bad attack came in August, 1933. May be controlled by picking up at night with aid of flashlight, by flooding with hose, or by poison baits. Best control is one used for web worm control, three pounds of arsenate of lead scattered over a thousand sq. ft.

The web worm is a comparatively new problem. There are about twenty species of Crambus, the so-called Bluegrass web worm, *C. teterellus* being the one causing the damage here. The egg is small, laid at nite by moth in flight, hatches in a few days, (in cool weather maybe 40). Larvae spin web as soon as hatched; when they get to base of grass, they begin to build radial tunnels, lined and covered. Larvae cut off bases of leaves, may not eat all of leaf, as tunnel is built beneath cut off grass. Damage is more noticeable in velvet bents, making a moth-eaten appearance. In larva stage from 30 to 50 days, the pupa stage is about one half inch in the soil; in soil 10-14 days, then come out as moth. The pupa case is amber color marked with red lines, and is very small. Moths are gray, a quarter to three-eighths inch long; during the day hide with head lower than tail. Female moths begin flight early in the evening,

males later, mate around midnight, some 250 eggs dropped as they fly. Cycle is then eggs hatch in 5-10 days; larva, 45-50 days; pupa, 5-6 days; moth, 7-10 days. First moth noted at Kingston was on June 1st. Web worm winters as larva.

Best treatment is 2 pounds of arsenate of lead in 10 gals. of water sprayed on with pressure enough to get to base of plant where larva feed, this to cover 1000 sq. ft. A treatment around May 15th might get control of first brood.

At the business meeting held following the discussion the Nominating Committee reported the following as their selections for officers and committees for 1935:

The officers nominated for 1935 are as follows:

President ..... Guy C. West  
 1st Vice Pres. .... Howard D. Farrant  
 2nd Vice Pres. .... Ted Swanson  
 3rd Vice Pres. .... J. C. Sullivan  
 Secretary ..... Charles W. Parker  
 Treasurer ..... Frank H. Wilson  
 Trustee 3 yrs. .... Carlton Treat

### Entertainment Committee

Homer C. Darling ..... Alex Ohlson  
 John Latvis ..... Tom Galvin  
 Paul Wamberg

### Auditing Committee

E. Hanson ..... Wm. McBride

### Golf Committee

Arthur Anderson, Chairman  
 Paul Hayden ..... Joseph Oldfield  
 Emil Masciocchi ..... Ted Swanson

Plans are well underway for the annual Recreation Conference and Exhibition at the Massachusetts State College, to be held this coming year on March 15, 16 and 17th. Dig out your engagement pads now, and set these dates aside for the best show this season within hundreds of miles. Further plans and programs will be given in later issues of the NEWSLETTER.

## GRASS SEED NOTES

In looking over various issues of SEED WORLD recently, we noticed several items of interest:

### A Report on Seed for Golf Courses

New York, N. Y., Sept. 20 — Golf course seed market right now and for later fall delivery is so much higher than the average buyer realizes that it cannot be expressed easily in words. A hand to mouth local policy is advocated by those who hold the strings to the purse. Consequently where 2,000 pounds of bent were purchased a year ago, 200 pound suffices and instead of Chewings fescue 10,000 pounds, 1,000 pounds looks like a whole lot.

Cablegrams come to our office about crop failures in France, Germany, Hungary and portions of Poland. Cables come in from New Zealand requesting us to resell our purchases and holdings of Chewings fescue. This one market which opened at about 80/—some time ago, which roughly is 20c a pound, is between 140/— and 160/— today for import, which means between 50c to 60c per pound for first class or good grade Chewings. This automatically means a 70c Chewings fescue market at the golf courses, whereas in the past they have been paying around 30c only.

I look for a healthy demand on a small scale at high prices for fall seeding and also for early spring season. \$1.00 and \$1.50 bent grasses are stylish again and I don't mean maybe. Personally I hate to see these high prices, as they retard business. But with our own Minnesota and Iowa timothy and hay crops nearly a double failure and drouth conditions, what else could be expected? There can be no price relief until June or July, 1935, when new crops will start to trickle in.

Even outside matters, like yarrow, for which we used to pay \$1 a pound wholesale, costs us \$2 a pound today. The quicker golf courses purchase their immediate requirements, the less they will have to spend, because the peak of grass seed prices has not been reached yet. The relief will only come after next summer, provided there is not another drouth.—Fred S. Radway, Radway-McCullough Seeds, Inc.

The crop of Kentucket bluegrass seed is about one-fourth that of last year, due chiefly to the drouth, with freezes, a cold spring and insects as contributing factors. This crop was virtually a complete failure in Nebraska, Iowa and Kansas.

In the Maritime provinces about 1,700 pounds of New Brunswick creeping bent, one of the most satisfactory grasses for putting greens, will be available this year. The production of Prince Edward Island bent, or brown top, will be less than normal.

Washington, D. C., Sept. 15.—Ninety to ninety-five per cent of the Kentucky blue grass seed crop had been sold by growers up to September 3. The rate (speed) of movement has been fully normal, if not somewhat faster.

In Kentucky mostly 75c a bushel for rough, cured seed and in Missouri \$1.25 to \$1.50 were being offered to growers on September 3. These prices averaged 5c a bushel higher than on August 7, but were the same as were being offered during the last week of August.

The quality of the rough, cured seed (as distinct from re-cleaned seed) was again reported to be fair in Missouri and poor in Kentucky.—U. S. Bureau of Agricultural Economics.

Reports on redtop, meadow fescue and orchard grass indicate small seed crops. Those who conserve every bit of roughage in 1934 may find it welcome in 1935, with low supplies of hay, and seed for hay crops, a certainty next year.

At a recent meeting of the Rotary Club at Wellington, New Zealand, J. T. Martin, director of Wright Stephenson & Co., Ltd., of that city, gave a most interesting address, entitled "Our Greatest Asset—Grass."

He brought out the fact that the climate of New Zealand makes it a most ideal country in which to grow grass seeds and that today it is exporting seed of certified cocksfoot, white clover, crested dogstail, ryegrass, brown top and chewings fescue to Europe, Great Britain, United States, Canada, and Australia.

"In five years we have exported 13,814 tons of grass seed, valued at £922,408 and this year we hope to exceed all previous records, due to the fact that dry conditions in the northern hemisphere have brought about a heavy demand for all of our seeds," said Mr. Martin.

Confusion has existed in the labeling of ryegrass seed, particularly domestic or western grown. The following designations have been established by the California Department of Agriculture applicable to all ryegrass seed offered for sale in California:

*Lolium multiflorum*—Italian ryegrass. If local grown, shall be labeled "Italian ryegrass Western grown" or "Italian ryegrass Domestic." If imported, shall be labeled "Italian ryegrass imported."

In no case can *Lolium multiflorum*—Italian ryegrass—be labeled "Pacey's ryegrass."

*Lolium perenne*—Perennial ryegrass. If local grown, shall be labeled "Perennial ryegrass Western grown" or "Perennial ryegrass domestic." If imported, shall be labeled "Perennial ryegrass imported," or "Pacey's perennial ryegrass imported," or "English ryegrass imported," or "Australian ryegrass imported."—W. L. Goss, Seed Supervisor, Bureau of Field Crops, Dept. of Agriculture, Sacramento, Calif.

#### Seed Conditions In Germany

Aschaffenburg, Germany, Oct. 15.—Seed crops in Germany are considerably smaller than they have been any time during the past 25 years. The carry-over was also very light. Even the lowest price level for grass seed this year is considerably higher than last year.

Lawns and pastures have suffered severely from lack of moisture during the past growing season. However, in most sections the last few weeks the weather has been ideal. This has caused additional fall sowing, which has increased seed orders. This, of course, caused a further reduction of our already light seed stocks.

There will be an acute shortage of seeds of all grasses sown here in Germany, such as creeping bent grass, creeping red fescue, and German rye grass, also seed crops of yellow oat grass, tufted hair grass, sheeps fescue, fine leaved fescue, various leaved fes-

cues and wood meadow grass are very scarce. Sweet scented vernal grass is simply not obtainable.—Gustav Schott.

While most people think of bluegrass as the major component of all lawns and pastures, the annual production and consumption of redtop seed in the United States has been nearly equal to that of the famed Kentucky product.

Furthermore, practically 85 per cent of the world's supply of redtop seed and 95 per cent of the total redtop seed in this country is produced in a dozen counties in southern Illinois.

#### LIMING LAWN SOILS

Howard B. Sprague, Agronomist  
N. J. Agricultural Experiment Station

The principal reason for applying lime to lawn soils is to correct excessive acidity. In addition, lime improves the structure of the soil, increases its ability to absorb moisture, and provides available calcium and magnesium which are needed in small amounts as plant foods. Mildly acid and neutral soils are far more capable of supplying turf grasses with the necessary requirements for healthy growth than strongly acid soils.

The proper use of lime is an important factor in control of lawn weeds. In recent years, a theory of weed control based on the development of strong acidity in soils, has attracted considerable attention. Actual experimentation has shown the theory to be poorly founded in fact. Although the bent grasses and fescues are more tolerant of strong soil acidity than such grasses as Kentucky blue grass, even the acid tolerant species make a far sturdier growth on mildly acid or neutral soils. Moreover, many of the most pernicious weeds, such as crab grass, chickweed, and red sorrel, are fully as tolerant of soil acidity as the bent grasses. If the turf is infested with acid tolerant weeds, little or no injury to these pests can result from producing strong acidity.

The use of lime, fertilizer, and organic matter, to render the soil well suited for the growth of desirable turf grasses, and the choice of grasses adapted to conditions at hand, will aid greatly in eliminating weeds. When given an opportunity for vigorous

growth, turf grasses offer severe competition with weeds, for space, moisture, and nutrients.

Practically all soils in this region are naturally acid; in certain soils, acidity is extremely high. Moreover, the consistent use of sulfate of ammonia, ammonium phosphate, urea, and of complete fertilizers containing these substances, increases soil acidity. The liberal application of sulphate of ammonia for one or two years will increase the acidity sufficiently on many soils to seriously injure the turf grasses, unless corrected with lime. Ammonium phosphate and urea produce acidity less rapidly than sulfate of ammonia but their continued use without the addition of lime eventually renders the soil too acid for satisfactory growth of turf grasses.

Soil reaction is conveniently measured in terms of a standard unit known as the pH. A soil which has a pH. of 7.0 is neutral. Values lower than 7.0 indicate acidity; the lower the value, the greater the acidity. Values above 7.0 indicate alkalinity; the higher the value, the greater the alkalinity. In general, soil reactions in this region vary from pH. 4.0 to approximately 6.5, depending on the soil type and the past treatment. pH. values below 5.5 usually are unfavorable for the thrifty growth of bent grasses and fescues, whereas values below 6.0 generally are unsuited for Kentucky blue grass and clover.

The most practical method of reducing soil acidity is by the addition of lime. If the fertilizer used tends to develop acidity, lime should be applied periodically to prevent the reaction falling below the critical point for growth of turf grasses. The quantity of lime required will depend on the degree of acidity present and the form of lime. The greater the acidity, the larger will be the amount of lime required to produce a favorable reaction.

The principal forms of lime ordinarily available for use on turfed areas are *hydrated lime* and *ground limestone* or *ground oystershells*. The value of lime depends on its content of "lime oxides", that is, the percentage of the total weight due to oxides of calcium and magnesium. Hydrated lime of desirable quality contains 70 to 75 per cent of lime oxides, whereas ground limestones or oystershells should carry from 48 to 55 per cent.

In general, 1 pound of hydrated lime is equal in value to 1½ pounds of

ground limestone. Applied in equivalent amounts as top dressings on established lawns, the two forms of lime are equally effective. Hydrated lime is somewhat more rapid in its action than ground limestone, if the materials are incorporated with the soil. Wherever possible, lime should be thoroughly mixed with the soil layers to be occupied by grass roots. Uniform distribution of the material is important, since lime will move downwards in the soil, but not laterally.

The approximate amount of lime required per 1,000 square feet of surface to correct excessive acidity on lawn soils of different textures is given below.

Soil Acidity Expressed in pH Values	Pounds of Hydrated Lime required Per 1,000 Square Feet of Surface			
	On Light Sandy Soils	On Medium Sandy Loam Soils	On Loam and Silt Loam Soils	On Clay Loam Soils
pH 4.0	60 lbs.	80 lbs.	115 lbs.	145 lbs.
pH 4.5	55 lbs.	75 lbs.	105 lbs.	135 lbs.
pH 5.0	45 lbs.	60 lbs.	85 lbs.	100 lbs.
pH 5.5	35 lbs.	45 lbs.	65 lbs.	80 lbs.
pH 6.0	None	None	None	None

Increase the above amounts **one-half** if **ground limestone** is used instead of hydrated lime.

We are pleased to announce that

**MR. WILLIAM A. NYE**

who, for the past several years, has been Assistant to Professor Lawrence S. Dickinson of the Department of Agronomy, Massachusetts State College, is now affiliated with us and will continue our experimental work on our Proving Grounds for Turf Grasses here at Milford.

Mr. Nye will also call on you from time to time and we hope that, through him, we can be of further service to you.

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**F. H. WOODRUFF & SONS**

Grass Seed Division

Milford, Connecticut

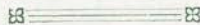
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## LIME ACID LAWNS IN WINTER OR EARLY SPRING

Howard B. Sprague, Agronomist

N. J. Agricultural Experiment Station

Many lawns in this region have become too strongly acid for thrifty growth of desirable turf grasses. In such instances lime should be applied promptly in winter or early spring to counteract excessive acidity. The successive freezing and thawing experienced at these seasons will aid in penetration of the material into the soil.

Recent experiments have shown that strongly acid soils are unfavorable for growth of turf plants in several ways. Such soils may become so impervious that normal rains and watering fail to moisten more than the upper inch or two of the sod. In actual field tests on established turf at the New Jersey Agricultural Experiment Station, water was found to enter neutral or mildly acid soils six to eight times as rapidly as on strongly acid soils. With moisture additions limited to the upper layers of earth, the turf soon exhausts the supply available, and suffers drought injury in hot dry periods.

Lawn fertilizers containing a substantial portion of the nitrogen in the form of ammonia compounds should be used with some caution on strongly acid soils, particularly if the turf contains bluegrass. Although such materials are excellent fertilizers on mildly acid or neutral soils, the ammonia compounds are actually toxic to grasses when applied liberally on soils possessing strong acidity. The correction of excessive acidity by the addition of lime before growth begins in spring will permit satisfactory use of the less expensive commercial lawn fertilizers during the growing season.

The quantity of lime necessary for correction of excessive acidity varies with the type of grasses present, the degree of soil acidity, soil texture and organic matter content. Lime should be applied only as required to correct acidity. In general, 25 to 75 pounds of

hydrated lime per 1,000 square feet of surface, or one and one-half times as much finely ground limestones, uniformly distributed, is adequate for lawns in this region.

## WINTER COVERS FOR LAWNS ARE UNNECESSARY

Howard B. Sprague, Agronomist

N. J. Agricultural Experiment Station

There is no need for applying covers of manure, leaf mold, humus, and similar materials to the lawn in fall or winter, as a protection against severe freezing weather. Healthy lawns will experience no winter injury even though left fully exposed. The application of mulches may actually injure the grass by giving protection to harmful insects, or as a result of exclusion of air from the sod. Furthermore, winter covers applied at this time of the year are not only frequently unsightly, but certain of the materials contain considerable amounts of weed seed.

The most effective treatment for prevention of winter injury to turf is the timely application of commercial fertilizer and lime. In general, lawns should receive 10 to 20 lbs. per 1,000 sq. ft of a complete fertilizer analyzing approximately 5 per cent nitrogen, 10 per cent phosphoric acid, and 5 per cent potash, (or an equivalent amount of plant food), in early autumn. Lime should also be added to correct excessive soil acidity. Turf which has been adequately limed and fertilized will endure the coldest winter weather without injury.

Although many lawn soils in this region are deficient in organic matter, the application of organic mulches to the surface of the lawn will not correct this defect. Organic materials of all types will improve soil structure, only when thoroughly mixed with the soil. Such incorporation is best accomplished at the time of seed bed preparation. On established lawns, organic matter may be incorporated with the soil to a limited



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extent by discing or spiking the turf before and after applying the mulch, followed by brushing or dragging to work the material into the openings.

Inasmuch as the Toro Manufacturing Company is one of the largest manufacturers of golf course equipment, we believe that the following statement, recently issued by that company, will be of interest.

The Toro Manufacturing Company was originally founded in 1914 to build motors for one of the prominent tractor concerns of that day. It is a corporation organized under the laws of Delaware and is owned by 356 stockholders. A majority of the factory employees and the field organization, including all the active executives, are stockholders.

The main plant is located at 3020 to 3060 Snelling Avenue, Minneapolis, Minnesota, with switch track facilities on the main line of the Chicago, Milwaukee, St. Paul & Pacific Railroad. Distributing stations, all privately owned, are located in twenty-five American Cities, in addition to a number of foreign countries, including Japan, Phillipine Islands, Hawaii, Panama, Argentina and South Africa.

The Company builds grass cutting machinery, making over twenty different items including tractors, gang mowers, power mowers, dump wagons, rollers, highway sickle mowers and single cylinder, air cooled motors.

Production and all matters pertaining thereto are under the direction of the President assisted by the Chief Engineer. It is his duty to develop suitable machines, perfect them and supervise the operation of the factory.

Finances, collections and disbursements, are under the control of the Secretary-Treasurer, whose duty it is to see that the affairs of the Company are kept in a liquid condition. The Company carries all of its own accounts and notes and does not deal through finance companies.

Sales and advertising are handled by the Sales Manager who prepares the catalogs, direct by mail literature, publication and other forms of publicity.

The Company has pioneered the de-

velopment of a number of worthwhile inventions which have greatly improved the efficiency of all types of mowing machinery.

The objective of the Company is to produce high quality machinery and to do business on a sound and conservative basis.

#### ADVANTAGES TO GREENKEEPERS FROM FAIRWAY WATERING

If economical, complete irrigation had no benefits other than to the players, proper irrigation would be entirely justifiable at any reasonable cost. However, there are many authorities who maintain that fairway irrigation is of such great and lasting benefit to the Green Department, and so effective in regulating the costs of maintenance, that irrigation is justifiable on these grounds alone.

**First**—fairway irrigation, together with tee, green and lawn irrigation, makes the turfing operations independent of lack of rain. Operations can proceed on schedule, with regular even staffs. No rushing. If rain fails, artificial irrigation will heal roughed ground, germinate seedings, foster young grass and save its loss, "wash in" fertilizer, and result in such fine turf that the Green Chairman and his Greenkeeper can concentrate on their work unhampered by "kicks".

**Second**—fairway irrigation prevents the loss of grass plants because of drouth—the plants virtually all survive. In 1930 Wakonda Country Club (Des Moines) lost over fifty (50%) percent of their turfplants—a loss measured only in thousands of dollars.

It is uniformly agreed among greenkeepers that one good seeding is required after installing fairway watering to gain the greatest benefits from the irrigation, but that thereafter the annual seeding expense is considerably reduced. Score here another distinct advantage for fairway irrigation. The ultimate saving in annual seeding expense is substantial—less seed, less labor, less tilling.

(from "The Advantages of Fairway Watering")

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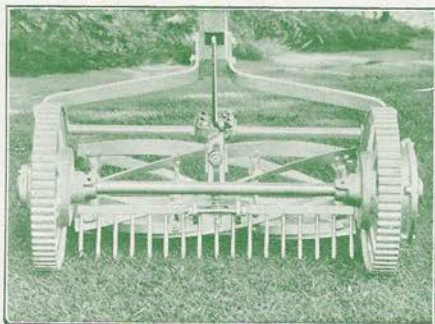
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Crab grass is perhaps the worst of summer weeds. It is purely a warm weather plant and does not appear until the days are really warm. It is an annual and will reseed itself with millions of seedlings. Infestations will grow yearly until it has taken possession of the area.

It may be pulled out by the roots, or it may be lifted at each mowing and catching the seedlings will limit the next year's crop. The latter is the easier and more rapid and less expensive method on areas other than greens.

Two TORO products have been used with great satisfaction for this work. On greens the Del Monte Greens Rake is used just before mowing to raise the stem and seed pods high enough to be clipped by the mower and carried away. Repeated treatments will be satisfactory results. We can name dozens of satisfied users. The newer product — The TORO Crab Grass Rake is designed for the hand mowers and the power mowers. With both types of tools you can now eradicate the crab grass from the Greens, Tees, Approaches and club house lawns.

Del Monte Greens Rake .....	\$16.00 delivered
Crab Grass Rake (Hand mower type) .....	3.75 delivered
Crab Grass Rake (Power mower type) .....	7.25 delivered



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