



# NEWS LETTER

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On the whole, it is patience which makes the final difference between those who succeed or fail in all things. All the greatest people have it in an infinite degree, and among the less, the patient weak ones always conquer the impatient strong.

—Ruskin.

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**SEPTEMBER**

**1939**

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

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September, 1939 Vol. 11, No. 9

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*The ideas and opinions expressed in the subject matter of this NEWSLETTER are not necessarily those of the Editor or the members of the club as a whole.*

#### SEPTEMBER MEETING

The regular September meeting was held on the 11th at the Marshfield Country Club, Marshfield, Mass. A demonstration of the Terferator was held in the morning.

The annual club championship was won by Emil Mashie with a fine gross score of 74. The runner-up was Maurice Ryan with a score of 81.

Net prizes were won by:  
Harold Mosher—91-67.  
Henry Mitchell—100-74.  
John Counsell—91-75.  
S. Braio—100-76.  
John Latvis—100-23-77.  
N. Sperandio—87-10-77.

#### WOODRUFF FIELD DAY

Over two hundred golf course, park, and cemetery superintendents, as well as many research men, met on September 13th at the Woodruff test plots at Milford, Conn. for the annual Woodruff Field Day. The program was in charge of C. W. Baker, but the entire Woodruff organization, from the Grass Seed Division office staff in charge of registration to Vice President F. H. Lindley, who welcomed the gathering, were busy making all guests welcome.

Mr. Baker led those present in a personally conducted tour of the plots, explaining that the plots were used as a means of answering some of the questions asked by their customers, and hence were really a means whereby the company could be of better service to its customers.

Mr. Lindley in his address of welcome announced that it was planned to have a bulb display at the gardens adjacent to the turf plots next Spring of over 150,000 bulbs.

A display in the registration tent of various methods of merchandising seed mixtures was of interest.

Prize winners of the New Bedford tournament in August were Ed. Patnoad of Meadowbrook, R. I. Association winner, first net.

Also:

Paul Hayden—83-18-65.  
Phil Cassidy—82-13-69.  
Guy West—88-17-71.  
Frank Wilson—96-24-72.

The following news item has been sent us:

Dr. O. J. Noer, Chief Agronomist of the Sewerage Commission gave his colored slide lecture to an assembled group of 40 greenkeepers and pro-greenkeepers at the Augusta Country Club on the evening of August 21st.

The arrangements were in charge of Frank A. Gilman, pro-greenkeeper of the local club. An excellent steak dinner was served preceding the lecture.

Dr. Noer advised the greenkeepers to reseed into the fairway areas which were killed by the extended drought. He said it was a little early to make sure how much of the apparent dead grass would revive itself. This old dead grass should be raked off before seeding unless the new seed could be drilled into the soil by a mechanical alfalfa and seed drill.

James Lawson, for many years greenkeeper at the Misquamicut Golf Club, Watch Hill, R. I., has recently resigned, and the position has been filled by Oscar Chapman, greenkeeper for the past ten years at nearby Winnapaug Hills, and prior to that assistant greenkeeper at Misquamicut.

## R. I. GREENKEEPERS FIELD DAY

## NEW JERSEY NEWS

A very successful tenth annual Greenkeepers Field Day was held at the R. I. State College on September 18th.

The usual trip to the experimental plots for inspection and discussion of the various experiments being conducted there was in charge of Drs. De France and Erwin. The various plots of putting green grasses and strains, some of which are now over ten years old, and others new, continue to be of interest. Fertilizer experiments, including various ratios, sources of nitrogen; comparison of individual plants from promising strains, and several other experiments were all explained by those in charge. A plot of Piper velvet bent a year old, sown from seed at rate of  $\frac{3}{4}$  pound per thousand square feet now has made a fine sod, and compares favorably with a like plot beside it planted with stolons.

The speaking program following lunch was in charge of Dr. Basil E. Gilbert as toastmaster. Pres. R. G. Bressler of the college extended greetings and welcomed the men to the campus. Dr. DeFrance read a letter from Mr. E. K. Thomas, Chief, Div. Forests, Parks, and Parkways. Mr. Thomas was to have been the principal speaker, but was unable to be present. Several points in Mr. Thomas' letter were of interest and were discussed by Dr. DeFrance and others. Greetings from various green-keeping organizations were given by Pres. Jack Counsell of the Greenkeepers Club of New England, Pres. Andy Lentine of the Conn. Association and Guy West of the R. I. Association. A letter from Kent Bradley of Paterson, N. J. was read.

At the annual meeting of the R. I. Greenkeepers Association, the 1938-39 officers were re-elected. These officers are: Guy C. West, president; R. W. Peckham, vice president; Dr. J. A. DeFrance, secretary; Martin Greene, treasurer.

Late in the afternoon several went to the Point Judith C. C. to inspect their new Piper velvet greens, and some to play a few holes as time permitted.

Our congratulations to the Arthur Andersons of Brae Burn on the arrival on July 20th of a real husky now known as Paul Arthur! Another future Greenkeeper, Andy?

Two meetings in the same month, kept some of us stepping about. The first was held on July 10th, at Forsgate Country Club. Here, our host Percy G. Platt, the course superintendent, showed us traps—that are, to say the least, "terrific." Like the old vaudeville days, they run 10-20-30. Not price of admission, but depth in feet. No kiddin', your correspondent stood at the bottom of one trap, to take a photo of the boys up on the edge of the green bank. The photo distance meter showed that they were 30 feet away—mostly up.

They say that greensmen that have worked there some time—have one leg shorter than the other from standing on the banks—and if they turn to walk along the slope the other way—they go rolling down into the sand. Seems as if we heard that the mules are like this in the Ozark mountain regions. Platt's greens were in excellent shape—seaside bent, not a weed visible. His largest green is some 20,400 square feet—the total for the 18 holes is two hundred thousand—all hand mowed.

The last day of July we gathered at Homestead Golf Club, Spring Lake, N. J. Traps are more lady-like here. Greens—excellent, seaside bent, but of still finer texture than those of Forsgate. Supt. Schenker said he uses seed delivered in sealed cans. May be something to this—canned oil, canned beer, canned music, canned soup, and even canned—nuts.

Anyway, the greens were in great shape. Seems that down South Jersey way they built courses with more care than up our way. Down there they used plenty of top soil, well rotted manure, sharp sand, and made up a good seed bed—deep enough for grass roots to find a design for living.

Our speakers of the evening were headed by Dr. John Monteith, who gave a progressive report on demonstration turf plots set out in various parts of the country.

Next we had several club officials each say a few words: the green chairman, Mr. F. F. Schock of Homestead, and some from Trenton Country Club.

An exotic touch was given the meeting by the presence of Senior J. F. Andia, Greenkeeper of the Havana Country Club. This gentleman from the Paris of the West Indies gave us a new slant on greenkeeping. Acapulco, Angel-

ton, Cantamazo, Bermuda, and our old friend Italian Rye, are the turf grasses of Cuba. Top soil varying from six inches to six feet deep, rainfall as high as fourteen inches a month. Cut greens twice a day—some days. Greensmen's wages—one dollar and a half—for eight hours.

When we got up from table, we saw a reel of colored movie film taken by Prof. Dickinson of Mass. State College, during our Eastern Sectional Meeting. G. S. A. President Ermer, and N. J. Pres. Ed. Cale may next be headed for Hollywood—-. Only trouble with the film was the absence of glamour gals.

Next, we saw and heard a sound film, "The Soil", through the courtesy of the American Agricultural Chemical Co. Sitting back looking on makes one realize that our work is largely the finishing touches of processes that may begin hundreds, yes, thousands of miles away from our little patch of green—on the world so big.

Percy G. Platt, has responded to the call for a volunteer reporter for continuing this feature of New Jersey news. Thanks Perc, good luck,—and don't take any plaster of paris golf balls.

Kent Bradley.

The New Jersey Greenkeeping Superintendents' Association met August 28th at the Mountain Ridge Country Club, West Caldwell, N. J. Superintendent Arthur Burton, the host, greeted us all upon arrival and made us all feel indeed welcome. By the way, for all those who do not know it, Arthur is the treasurer of the N. J. Association, and has been since its organization. Arthur's greens were in exceptionally fine condition, considering the spell of miserable weather we have just been through. In fact, the general condition of the whole course, was indeed a credit to the able superintendent.

The attendance at the N. J. meetings have certainly been something to talk about. All members are taking more interest and activity in the doings of the association. Thirty-five members were present, including some of the superintendents from Westchester County, N. Y. A number of our brothers from Westchester County gave some very interesting talks and all expressed the wish, that the N. J. members come to Westchester County in the

near future and meet with them. To this, the N. J. Association accepted.

Preliminary work in preparing for the G. S. A. Conference in New York in February of next year was started. Much must be done between now and next February.

About forty attended the dinner so ably prepared by the manager of the club. Among those present besides the brothers from Westchester County, were Dr. C. C. Hamilton and Mr. Thomas C. Longnecker of the N. J. Experiment Station at New Brunswick, N. J. and Mr. W. E. Lafkin of the Golf and Lawn Supply Co. of Scarsdale, N. Y. Mr. Lafkin brought along his slide camera, and showed us some pictures of the injury on greens and fairways caused by last years heavy rains, also pictures showing the good results obtained on these same areas by reseeding. These were all very helpful and interesting.

All eyes turned to the Turf Growers Field Day at the New Jersey Agricultural Experiment Station, New Brunswick, N. J., held on September 12, 1939. We in Jersey saw many of our brothers from nearby sections.

Percy G. Platt.

#### TURF FIELD DAY AT THE NEW JERSEY AGRICULTURAL EXPERIMENT STATION

by Dr. H. B. Sprague

Approximately 200 people attended the annual turf field day on the experimental plots of the New Jersey Experiment Station, New Brunswick, N. J. on September 12. Three points of interest were specifically covered during the day. One of these was the great value of lime when used in conjunction with other soil improving materials. The principal benefits derived from the proper use of lime include the great increase in the ability of the soil to take in moisture and maintain satisfactory growth in dry periods, the correction of sod-bound condition by stimulating the normal decay of the annual crop of grass roots, thereby increasing soil humus, and the improvement in ability of grass to utilize nitrogen fertilizer present in the form of ammonia. In many of the strips where lime had been applied in contrast to adjoining areas with no lime, the turf covered was complete and thrifty in comparison with

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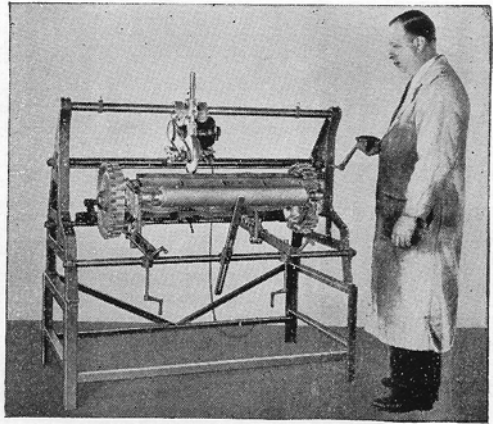
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only 50 to 60% coverage. The difference was most striking where no artificial water had been given during the summer to off-set the effects of the severe drought.

The second feature of the day was the display of new species and strains of grasses, particularly those which had been claimed to be capable to producing turf without mowing. Although several species had required little or no mowing during the dry season, they were poorly adapted and suffered severely from the drought. The general conclusion was that standard species and strains were still preferable because of the better quality of turf produced, and mowing was not yet to be discarded.

The essentials of crab grass control were likewise displayed, with a large number of plots showing no crab grass at all, in contrast with heavily infested areas nearby where the essential factors for crab grass had not been followed. The control measures include the proper use of lime and a complete commercial fertilizer in fall, the introduction of aggressive grass species where this is necessary, the maintenance of a height of cut of 1¼ inches or longer, beginning in early spring and continuing throughout the summer, and the use of artificial watering only when absolutely necessary, and the practice of watering deeply whenever additional moisture is needed.

New circulars on the use of Velvet bent for putting Greens and Other Fine Turf, and on control of white grubs, were distributed to those present. These publications may be obtained from the New Jersey Experiment Station on request.

### VELVET BENT GRASS FOR PUTTING GREENS AND OTHER FINE TURF

Howard B. Sprague, Agronomist  
(Circular 393 from N. J. Agri. Ex. Sta.)

Velvet Bent grass (*Agrostis canina*) is a distinct species of grass but is related to the other bent grasses commonly used for closely cut turf. Although some commercial mixtures of grass seed have been called "velvet" such mixtures are not to be confused with this grass with its distinctive characteristics and superior texture of turf produced. Velvet Bent is well named, since the foliage is very dense,

the leaves are extremely narrow and erect, and the sod gives the general appearance of a luxuriant green velvet. Velvet Bent grass spreads slowly by creeping stems, and is very persistent when once established. The improved strains of this species are superior to other grasses for putting greens, grass tennis courts, and similar areas where closely cut turf is required. Unlike the other bent grasses, Velvet Bent is also well adapted to growth in shaded areas and is tolerant of droughty and poor soils. Velvet Bent is also an excellent lawn grass, since, unlike creeping bent, it does not tend to become matted and unthrifty when cut at lawn height.

### Improved Strains

In recent years commercial seed supplies have been established of several improved strains, such as Kernwood, Piper, Emerald, and a new strain developed at the N. J. Experiment Station called **Raritan Velvet Bent**. Raritan Velvet has been substantially superior to other strains in tests at New Brunswick. Seed of these strains is not only better adapted to the soils and climate of this region than the unselected commercial Velvet, but also produces a better quality turf which is more resistant to diseases.

### Planting New Putting Greens

The soil conditions desired in establishing new turf with Velvet Bent grass seed are similar to those for most other grasses. There should be good drainage both at the surface and within the soil, since this permits deeper root growth and greater durability of the sod. The soil should be limed to correct excessive acidity and improved with a complete fertilizer to provide an adequate supply of nitrogen, phosphate, and potash. The incorporation of well-decomposed organic matter to a depth of several inches is also desirable. Since the seed of Velvet Bent grass is exceedingly small (approximately 10 million to the pound), there is no necessity for planting more than 2 pounds per thousand square ft. In order that a uniform stand be obtained, the required seed should be mixed with screened soil or compost, to give greater volume, and broadcast uniformly over the surface. After planting, the soil should be raked lightly, care being taken not to plant too deeply. The seedbed should be kept moderately moist with a fine spray if necessary, until the grass is well established. The ideal season for new seedings of

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Velvet Bent grass is in early fall, although early spring plantings are also successful. The grass will survive plantings at other seasons quite satisfactorily if kept adequately watered and if weeded to prevent undue competition from crab grass and similar pests.

Where Velvet Bent is to be used for fine turf, mowing should begin as soon as the seedlings have reached a height of one half-inch. The height of cut should be gradually reduced with successive cuttings until a height of three-eighths inch is reached. The normal quality of turf will be obtained more rapidly when handled in this fashion than when the grass is allowed to grow to a greater length. To develop smoothness of soil surface and to avoid scalping of high spots in such close mowing, top-dressings of well-prepared compost should be made after each cutting.

### Regular Care of Closely Cut Velvet Bent Turf

Velvet Bent turf occasionally tends to produce seed stalks in May and early June. These stems can be removed readily by raking or brushing prior to

each mowing or by mowing with a brushing attachment on the machine ahead of the cutting unit. When properly managed, Velvet Bent has no tendency to become coarse or "grainy" at any season of the year. It is recommended that a mowing height of five-sixteenths inch be maintained on established Velvet Bent during most of the growing season. This height, however, may be reduced to one-fourth inch in cool periods if necessary for a satisfactory playing surface. As in the case of other grasses, exceedingly close mowing reduces the root system and vigor of the grass and, consequently, should be avoided.

Lime applications should be made at intervals of 2 or 3 years in the amounts required to prevent the development of soil acidity. The fertilization program should be such that there will be an adequate supply of phosphate and potash, as well as nitrogen, in the soil. Ten to fifteen pounds of a 5-10-5 or similar fertilizer per thousand square feet, applied in early spring and again in fall, should take care of the phosphate and potash needs. Additional nitrogen fertilizer may be required during the remainder of the growing season to maintain slow but steady growth. Regular top-dressings with a compost of sandy loam texture, reasonably high in organic matter, should be made as necessary to maintain a firm resilient turf and to keep the putting surface true.

Where turf has previously been treated to control grubs, it is recommended that lead arsenate be applied at the rate of 2 pounds per thousand square feet, mixed with equal amounts of compost or some other suitable carrier, in late May or early June, and again in the latter part of the summer, to prevent any injuries from sod webworm and the grubs of beetles. Although Velvet Bent is apparently more resistant to brown patch disease than are other bent grasses, regular treatments with mercury compounds are desirable.

With the aforementioned management practices, competition of weeds should be a minor difficulty on Velvet Bent turf. If crab grass or other weeds become established, however, they should be removed by hand weeding as soon as they appear. Control of clover is usually much less difficult on Velvet Bent turf than on other turf and is readily accomplished by proper feeding with soluble nitrogenous fertilizers during the growing season.



### Velvet Bent Grass for Lawns

When Velvet Bent grass is used in lawn mixtures with other grasses for shaded locations, or is grown alone either in sunny areas or in the shade, the requirements for growth and the details of management are similar to those of other lawn grasses. Under such treatment, Velvet Bent produces turf much denser and finer in texture than that of other species. When seeded in mixtures, not more than 5 per cent of the total weight need be made up of Velvet Bent, since this will provide a very large percentage of the total number of seeds in each pound. Velvet Bent seeded alone on lawns may be planted at the rate of 1 pound per thousand square feet, which will provide 10,000 seeds for each square foot, with even distribution. There is no advantage from heavier plantings, since dense stands of plants allow less opportunity for individual seedlings to become well established.

#### Purchase of Seed

In purchasing Velvet Bent seed it is essential to note the quality of the seed.

The first consideration is whether it is an improved strain, as noted above, since unselected seed will perform less satisfactorily than the superior strains. The second consideration is the purity. It is desirable to obtain Velvet Bent grass which is at least 85 per cent pure, with less than 5 per cent of other grasses. The weed seed content should be less than one-half per cent. For production of pure Velvet turf, the presence of redtop is less objectionable than Colonial bent or creeping bent, since the redtop will readily disappear under regular mowing, whereas the other species will persist and produce an uneven quality of turf. The germination of Velvet Bent seed should be 80 per cent or higher. Velvet Bent seed is more expensive to produce and therefore sells at a higher price than seed of other grasses. The cost of seeding Velvet Bent should be calculated, however, on the basis of the area to be planted rather than on the cost of the seed per pound. The number of seeds per pound of various turf species, and the average seeding rates, are given in the following table:

Grass Species	Approximate Number of Seeds per Pound	Average Seeding Rates of Individual Grasses per 1,000 Sq. Ft.	
		Lawns	Putting Greens
		Pounds	Pounds
Velvet Bent	10,000,000	1	2
Colonial Bent	6,000,000	2	4
Seaside Bent	4,000,000	2	4
Redtop	4,000,000	3	5
Kentucky Bluegrass	1,700,000	3	—
Chewing's Fescue	500,000	10	20

## Grass Seed for Fall Sowing

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## TALKS ON TREES

By E. Porter Felt

Little sack-like enlargements on the leaves of soft maple and American elm are extremely common on some trees in midsummer.

These peculiar growths are produced by tiny plant mites, microscopic in size. They are hardly visible to the naked eye. These plant mites winter under the bud scales and produce their peculiar bladder-like swellings or galls on the developing foliage. Those on the soft maples are about a fifth of an inch long, frequently somewhat pear shaped, green at first, later turning to a brilliant red. Within each gall one may find literally hundreds, possibly thousands, of the mites. Occasionally most of the leaves on good sized trees are badly deformed.

A similar gall, likewise produced by mites, occurs in great numbers on American elms. The galls are about a sixth of an inch long, tapering both at the point of attachment to the leaf and at the tip, and like the maple galls are inhabited by tiny plant mites. A great proportion of the leaves of large elms may be disfigured with these growths.

The mites which produce galls are peculiar in that they are somewhat pear shaped and have only four legs, whereas most mites are provided with eight. The gall producing plant mites are closely related to the more common blister mite of the pear and apple. This pest produces a brownish, flattened swelling on the leaf. There was a time when the blister mite was regarded as a serious pest in fruit orchards. It is still abundant occasionally on unsprayed apple and pear trees.

There are hundreds of species of plant mites, each restricted to one or a series of closely related plants. Many live in velvety or pile-like patches on the leaves. The mites irritate the tender leaf surface and cause the abnormal hairy growths which provide them with both food and shelter.

The gall producing mites mentioned above are readily controlled by a dormant spray of oil or lime sulfur.

The tap root is an important part of the root system of certain trees.

The conditions observed after thousands of trees had been uprooted by the hurricane led to some discussion in relation to the tap root and its importance. Many young trees develop a tap root which is an important part of the root system for a considerable period. This is true of hickories, beeches and oaks. The dominance of the tap root in the early development of the tree had led to the assumption by many that such conditions persist throughout the life of the tree.

The same general principles govern the development of roots as determine the growth of branches. Roots grow where there is a supply of moisture and oxygen in the soil as well as fertility. It is evident that the tap root cannot penetrate underlying rock, hardpan or water logged soil because this last condition shuts off the air supply. The area surrounding the young tree usually possesses as much moisture and plant food as that beneath the tree and the supply increases with the spread of the roots. The enlarged feeding area is favorable to root growth and after a tree has attained the age of fifty years or more, it is easy to see that outlying soil areas are likely to contain more plant food and more moisture than those immediately under a sizable trunk where earlier root action has reduced nutrients to a minimum. These conditions suggest the lateral roots may largely supplant the important tap root of the young tree. Investigation in Europe of the root development of beech shows a dominant tap root during the first twenty-five years or thereabouts and a relatively small tap root in the fifty year old tree.

Tap roots may penetrate to a depth of some 15 feet in moderately dry, well aerated soils, but as the tree ages, the lateral roots become more important in absorbing the under-ground requirements of trees.

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Worthington equipment pays for itself quickly in time, money and man-power saved for other necessary maintenance work and in member - satisfaction with improved playing surfaces. Now, while you can watch the performance of old or obsolete machinery, is the time to consider the savings you can effect in repairs alone by replacement with modern, up-to-date Worthington equipment. You, too, can have a course of championship caliber. In the last 15 years 46 out of 60 championship courses chosen for the U. S., British and Canadian Open and the U. S. Amateur Championships used Worthington mowing equipment.



The famous Worthington Golf Chief, streamlined for beauty and utility.



Worthington Golf Chief and 7-gang mower, which we believe, is the fastest, most flexible and economical gang mowing outfit in the world.



Worthington Overgreen shown in use at the famous Yale University Golf Course. One man with one Overgreen can cut the full 18 holes—including travel between greens—in five hours.

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*Tear out and mail this coupon, today, for handsome, illustrated catalogue showing how you can get increased efficiency and give your members a better golf course at the same time.*

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