



NEWS LETTER

Failures come to all persons who strive to do something. They are the mark of the man who tries. Few persons without scars have ever been in battle. Our greatest glory lies not in never falling, but in rising every time we fall.

—Grit.

FEBRUARY

1938

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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213 Calvin St., Fall River, Mass.

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February, 1938 Vol. 10, No. 2

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.

Attention is again called to the remaining Winter inside meetings, as follows:

March 7, 1938—Dr. Walter S. Eisenmenger of Mass. State College will speak on "Soils".

April 4, 1938—Dr. John Monteith of the U. S. G. A. Green Section will speak on "Research—Past, Present, and Future".

Read carefully, elsewhere in this issue, what Frank Wilson has to say regarding Turf Research. If you are a Massachusetts citizen, help push Senate bill No. 220 through the Legislature.

President Mitchell has appointed the following committees for 1938:

Employment—West, Anderson, McBride.

Welfare—Wanberg, Counsell, Greene.

Inter-relation, Mass.—Wilson, S. Mitchell, Swanson, Parker. R. I.—West, Peckham, Greene.

After nearly sixteen years at the Fall River Country Club, ye Editor is now greenkeeper, course superintendent, or what have you at the Rhode Island Country Club, West Barrington, R. I. However, address all mail to Fall River until further notice.

Senate Bill No. 220

WHY DO WE NEED TURF RESEARCH?

A bill has been filed and a sum of \$15,000.00 is being asked of this session of the Massachusetts Legislature for buildings, the equipping of adequate laboratories and providing personal service necessary to promote research relative to the growing of fine turf and lawn grasses and to conduct studies as to the maintenance of such turf and grasses. Why?

To establish and maintain a suitable turf for specific purposes requires a knowledge of technique much beyond the realization of the average layman. The basis of this knowledge is scientific research, little of which has been done and much of which needs yet to be done. In other branches of agriculture the State has provided adequate research and the information to operate successfully is readily available. At the present time there are no workers in the Massachusetts Agricultural Experiment Station at Amherst engaged in the study of turf problems.

It is hoped that an efficient service may be established at the easily accessible Field Station of the State College which is at Waltham.

It is difficult to estimate the areas in grass in playgrounds, athletic fields, in parks, cemeteries and along highways. But it is certain that the pathetic attempt to establish and perpetuate good turf in these locations too frequently results in disappointment through lack of knowledge as to proper practices.

Grass growing for special purposes has reached its highest degree of perfection on the golf course despite inadequate information. Is there a greens chairman or greenkeeper who, after the disastrous summer of 1937, will say that there is adequate information and no need for research? One little insect, about which entomologists could give very little information, did enough damage to pay the cost of Senate Bill No. 220 for some years to come.

Figures on areas and money spent on growing turf are difficult to obtain. The best organized are the golf course interests. From them we obtain something of the magnitude of the industry.

There are 230 golf courses in Massachusetts, 160 of which are in the locality of Worcester and east of Worcester, 70 west of Worcester. Figures on the 160 courses Worcester and east are as follows: three 27-hole courses; sixty-four 18-hole courses; ninety-three 9-hole courses. These courses occupy 23,000 acres of land. They may be further divided into 50 membership courses open to the public; 29 courses owned by one or two persons and operated as a business; open to the public; 10 Municipal courses; 2 State owned courses; 12 semi-private courses and 47 private courses. 133 courses in all open to the public.

The assessed valuation of these 160 clubs is approximately 25,000,000 dollars and they pay in taxes about \$600,000.00. The wages and salaries paid by these clubs in 1936 was close to \$3,000,000. and the caddies who worked on these courses carrying bags received in the neighborhood of \$800,000.00. These clubs have invested in golf course equipment about \$900,000.00, and their replacement bill each year is about \$125,000.00. They purchase \$75,000.00 worth of fertilizer, \$15,000.00 worth of seed, and \$15,000.00 in sundry supplies. These figures are based on a survey made in 1936.

From the Home Owners Magazine we obtain the following information: In 1937 the new homes built or old homes improved totaled about 6500. At present, 600,000 persons own their own homes or are in the process of paying for them. Most of these homes have lawns or would if the owners had adequate information.

Figures are not available from tennis, cemeteries, baseball parks, football fields, playgrounds, parks and roadside beautification, but we do know that information is badly needed.

Other states have recognized the need for research in the growing of fine turf and lawn grasses. In New England, Rhode Island is doing excellent work and one has only to look at the fine lawn around the state capitol building in Providence, put in by the Rhode Island State Experiment Station, and compare it with the one in front of our State House in Boston to realize the truth of this statement. Research in turf culture is not a new thing. Unfortunately recommendations coming from New Jersey, New York, Pennsylvania, Ohio, Iowa or other experiment

stations have little application in Massachusetts where soil and climate are distinctly different.

What does research in fine turf mean? The determination of soil deficiencies, which is the work of a trained agronomist. The study of diseases and their control by the pathologist. The study of insects and their control by the entomologist. Proper methods of irrigation and drainage. The proper use of organic materials. The testing of equipment, a study of fertilizers, and other chemicals, etc., etc. Can this work be done by the turf grower? The answer is NO. The growing of grass plots to work out these problems and the growing of demonstration grass plots suitable for various purposes is also an essential part of this work. But most of all the right to go to the Experiment Station for advice from the scientists working there, accorded by the State to the market gardener, the florist and the nursery-man. It would take reams of paper to put down the problems confronting the turf grower in a single season. He needs a place to take these problems.

Support Senate Bill 220 and give him that help. **See your Senator and Representatives at once.**

Massachusetts Greenkeepers Association
Legislative Committee.
Frank H. Wilson
Chairman.

Mort Maxwell of Marshfield told us recently that he had found "pink patch" several years ago, and had sent samples to the late John Shanahan for identification. It was only since Mr. Erwin of the R. I. Station did the work with this disease, (as reported in the October last NEWSLETTER), that Mort found out what the pink patches were!

A lady says her husband has laid aside his golf clubs, but he keeps in practice by using the language of the sand-traps when he has tire trouble.

Rusty rifles cannot shoot straight, but well-kept equipment DOES work great!
—Kent Bradley.

"Some 'darn' their luck while others mend it."

RECREATION CONFERENCE PROGRAM GOLF SECTION

Sponsoring Organizations

Massachusetts Golf Association Greenkeepers' Club of New England
New England Section Professional Golfers of America

Golf Section—Friday, March 11

Visitors Please Register at Information Booth, Exhibition Hall

Second Floor, Memorial Hall

- 10.30 Graduation Exercises, 1938 Winter School for Greenkeepers
Introduction
L. S. Dickinson, M. S. C.
Two short papers prepared and presented by members of the Class of 1938.
Charge to Graduates, by
Carlton E. Treat, Supt. of Montclair C. C., Montclair, N. J.
Address and Presentation of Certificates by
Roland H. Verbeck, Director of Short Courses, M. S. C.
- 1.15 Combining with Park and Community Planning for Recreation Sections.
Address: The Recreational Facilities and Work of the Metropolitan District
Commission—Illustrated, by
Eugene C. Hultman, Commissioner.
- 2.30 Discoveries in the Seed Laboratory.
F. A. McLaughlin, Analyst, Mass. Agri. Exp. Sta.
- 3.30 Grass Seed from the Commercial Angle.
C. W. Baker, Milford, Conn.
- 4.00 Tour of Exhibits. Have you registered?
- 6.10 Dinner Meeting with National Parks, Community Recreation.
Speaker: Dr. E. Russell Bourne.

EVENING PROGRAM

- 8.00 Revolutionizing the Preparation of Compost, by
Robert D. Pryde, Race Brook Country Club, Orange, Conn.
- 8.40 Discussion by a representative of the North Eastern New York Green-
keepers' Association.
- 9.00 A Professional Golfer Takes a Course For Greenkeepers.
Voight, Professional, Sunningdale, Scarsdale, N. Y.
- 9.20 Let's Diagnose the Trouble.
L. S. Dickinson, M. S. C.
-

Golf Section—Saturday, March 12
Second Floor, Memorial Hall

- 10.00 The Obligations of the Golfer.
F. J. Sievers, Director, Mass. Agri. Exp. Sta.
- 10.30 Maintenance and Other Problems of Turf Superintendents.
M. E. Farnham, Superintendent, Philadelphia Country Club,
Philadelphia, Pa.
- 11.30 Changing the Physical Texture of Soils and Soil Conditioners.
Professor George B. McClure, University of Ohio, Columbus, Ohio.

HAVE YOU REGISTERED?

- 2.00 Address.
President Hugh P. Baker, M. S. C.
- 2.20 Program sponsored by THE GREENKEEPERS CLUB OF
NEW ENGLAND.
Mr. Robert A. Mitchell, President.
Subject: 1937 on the Golf Courses of New England.

Pacific Hall, Amherst

- 6.30 Old Fashioned New England Banquet. (Our Third Annual).
Guest Speaker, Mr. Erastus B. Badger, President, Massachusetts Golf
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Followed by a Golfing Trip Around the World, and professional enter-
tainment.
Ticket for banquet, including entertainment, \$1.25.
Please cooperate by purchasing your tickets early at the registration
booth in the Exhibition Hall.

—LIMITED NUMBER. BUY EARLY!—

Sunday, March 13

The Informal Room 20, Stockbridge Hall (Basement)

- 9.00 Annual Meeting of the M.S.C.G.A. Alumni of the Winter School for
Greenkeepers.
- 10.00 **The Experts on Trial.**
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NEWSLETTER officers, see page two.

FEBRUARY MEETING

The regular meeting for February was held at the Waltham Field Station on the 7th. The speaker was Dr. Howard B. Sprague, Agronomist at the New Jersey Agri. Experiment Station, with the subject of discussion, "Poa annua". Dr. Sprague told of the various experiments that had been conducted with this grass, and mentioned Bulletin 630, recently published with results of these experiments.

Experiments were conducted to try to find out how to keep poa annua if necessary, or get rid of it if so desired. If soil is poor in late Summer, there is an ideal condition for poa annua to come in. Velvet bents are fully as capable of crowding out poa annua as are the creeping bents.

Poa annua is generally an annual. Less poa annua was found after a five year test with arsenate of lead, but this is not a control, if other conditions are favorable for growth. Lead arsenate is more effective if applied in Summer, so that it is near surface during seedling stage.

The evidence previously was that poa annua was shallow rooted. Experiments showed that the proportions of roots in various soil layers are about the same as other grasses. Not naturally shallow rooted, but will thrive on compact soils.

Poa annua likes plenty of moisture.

Pot experiments—lime did not increase yields; with abundance of N. less seed heads were formed; heavy N. fertilization and lime and phosphorus and potash gave best yield.

Control is largely matter of competition; apply fertilizer at such times as permanent grasses can get most benefit. In Spring do not apply N. too early. Nitrate N. was found more favorable than ammonia N. to blue grass; hence, should avoid over stimulation with N., esp. where acidity has not been corrected.

Seed with desired permanent grass at such time as poa annua is germinating, to give competition; correct first any causes of permanent grass failure.

Lead arsenate is only active as long as it is acid, in contact with soil it gradually becomes basic, and becomes non-toxic to grubs, etc.

Lime is one of the best antidotes for an overdose of mercury.

Compacting of soil is more common failing than we realize.

There should be an increase in humus in grass soils through natural rot of roots; hence soils should not be too acid, so that roots may decay.

FAIRWAY IRRIGATION AT WIANNO

by Charles W. Parker

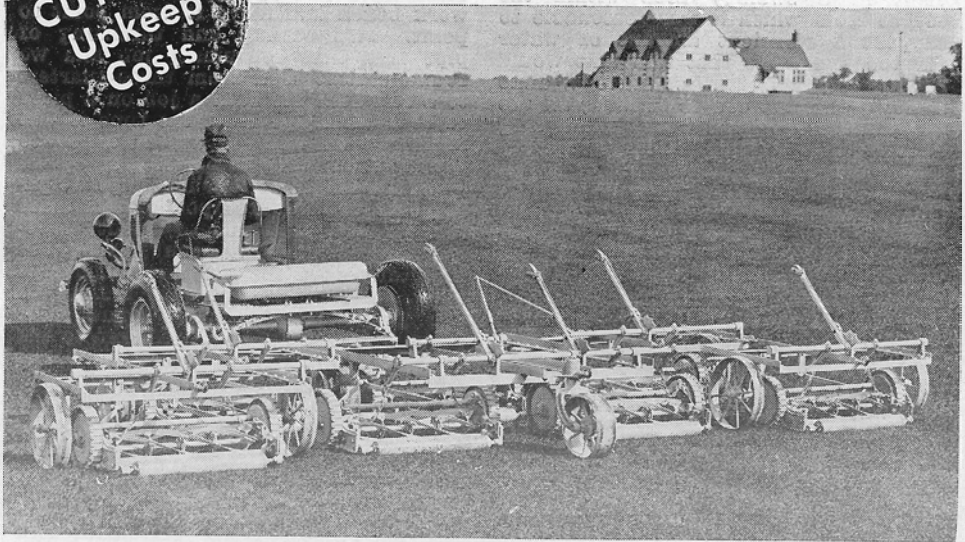
At Wianno, as at most clubs, the question of fairway irrigation has been under discussion for a number of years and some preliminary work had been done by the old Buckner Rainer corporation but had come to no real head and at the time that I came to Wianno Golf Club the feeling of the committee head seemed to be that for a summer club such an installation was a luxury and was not warranted. From time to time the idea was talked up and in 1936 it looked as though the demand would force a system in over the committee's head but the late summer rains came and apparently the matter was forgotten as it had been so many times in the past.

Early in the summer of 1937 there was a change in the committee and the member who had been opposed to irrigation resigned from the club and with no one to head up the opposition agitation for an irrigation system broke out once again. Since the Board of Governors ruled that such a system must be financed entirely by donation the matter of financing preliminary surveys was a real problem, however; after a few false starts a former associate of Wendall Miller's was located who made a very brief study and submitted an estimate of approximately \$14,000.

This amount was not only way beyond the amount the sponsors believed could be raised for the installation, but it was almost twice the amount that they, the sponsors, had, from incomplete and misleading information set up in their minds as what the outside cost should be. At this point the problem was turned over to me to see what might be done to "cut the cloth to fit the purse".

The water source problem was practically non-existent and it was obvious that the cheapest installation should be made by taking water from three sources and automatically dividing the system into three separate units. This was entirely practical and quite sound

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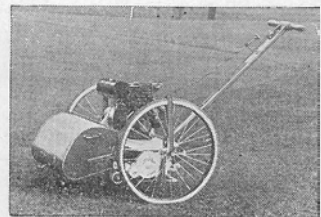


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as there are two ponds on the property and the third source was to be from wells in a swampy area within the course from which it was reasonable to suppose a sufficient amount of water for the five holes that this unit would supply could be drawn. Since Wianno is not a compact course drawing all the water from one pond would entail long lines of large size pipe, a large capacity pump and a large motor all of which worked out to make such an installation much more costly both for installation and operation than the three unit idea.

Since the Jones survey indicated too great a cost for eighteen holes it was decided to eliminate the five hole unit that was laid out to be served by wells and see what might be done on the remaining thirteen holes, one of which requires no fairway irrigation.

It was decided to salvage the existing two inch pipe on the thirteen holes and use it on the ends of fairway lines and for relocating the service to Greens and Tees and after much pro and con it was agreed upon to go ahead. Jones was called back to make the actual stake-out and I with my regular crew of five and such extra men as I felt were needed were handed the job of making the complete installation.

Jones is a cast iron pipe man and he was considerably disconcerted and dismayed to learn, before he got away, that because of a club contact and other reasons of policy galvanized steel pipe was going to be used. Come hell or high water. I did not favor this type of pipe and since corner cutting was absolutely necessary I had been pushing Transit but because of its relative newness and lack of any real history in these parts it was given little if any serious consideration.

A total of 10,400 feet of three and four inch pipe was received, six men were added to the regular working force and we went ahead. Immediately we found that the chain tongs either loaned us by the pipe jobber or by another golf club were far from efficient for screwing up this size pipe. Fortunately we had a three foot "stillson" wrench which soon proved to be very efficient so we bought two more and found this type of wrench entirely adequate for this size pipe. A short cut which proved a real time saver was in the use of a pair of wheels with a steel frame attached which we dug up, fitted with a pole and hooked up to the Toro tractor. On this we put our work table and pipe vise and so were able to do all

cutting and threading right on the job instead of having to haul the pipe to a central point or by trying to set up the work bench and move it from point to point. This cutting and threading of pipe is a time consuming job and we found that it took from three-quarters to a full hour for such a job on a piece of four inch pipe from the time it was measured up until it was returned to the ditch all ready to be screwed up.

With a length of four inch pipe weighing over two hundred pounds and three inch of the same length about three-quarters as much it soon worked out that three men for the three inch pipe and four men for the four inch made two good teams although there were times when we added a fifth man to the four inch pipe team when curves or grades increased the difficulty of starting the threads true. I did not try to keep a day by day record of footage laid as several factors beyond our control speeded up or slowed down footage. In all some 13,500 feet of pipe were laid. This was four, three, two and one and one-quarter inch. The three and four inch is all in mains and the two and smaller size in runs to Greens and Tees or in laterals from the mains to spot a valve exactly. The cost for the entire operation, lifting sod, ditching, making up pipe, backfilling and returning was 10 cents per foot and required thirty-one working days.

I do not offer that unit cost figure as a mark for anyone to shoot at nor do I excuse it as being high for I do not know what other installation costs have been. The only cost I was able to find was on a Transit job in similar soil conditions but since the pipe was buried below frost and even to a depth of six feet that cost was of no value for comparison being just twice as much. There can be no question that our ditching cost is low and that we saved on this because of the steel pipe. The valve hook-up required a foot of depth and we went below that depth only as much as drainage and rolling terrain dictated. To get through a few knolls we went to three feet for a short distance and there was one run of 260 feet at two and a half feet. Incidentally a cost on this 260 feet at the two and a half feet depth showed the digging to be 4 cents per foot. Other than the above we ran along at an average around 18" with some runs off the fairways about six inches and one run of 300 feet which is off the course entirely lying on top of the ground.

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A. N. PECKHAM
KINGSTON RHODE ISLAND

Never having worked with either cast iron or Transit I cannot say whether they can be made up more cheaply than regulation screw joint pipe such as we used but I do know that cast iron would have averaged deeper than 18" and Transit even deeper. We had no serious difficulties in making up the pipe. Our first test showed four cocked joints in the larger sizes of pipe but this was entirely to be expected as the entire crew was absolutely green at handling pipe this heavy. We had no real trouble from poor joints after the first test but we learned to expect splits and blow outs in the two inch salvaged pipe which only proves the point that salvaged is not always saved.

Owing to market conditions the comparative cost of steel and galvanized pipe was relatively the same. This is not usual as the turning point in cost of steel and cast iron is usually in favor of cast iron at three inch pipe and I do not favor galvanized steel from the standpoint of permanency but where ledge or rock or heavy clay conditions obtain steel pipe may be worthy of consideration if it appears that the ditching cost to get cast iron or Transit to the proper depth is going to be prohibitive.

Draining the lines is to be done directly at the point of take off from the mains and at the ends of lines. The number and location were dictated by the terrain. A one inch bronze gate valve with a T handle was used. Over the T handle was slipped a piece of two inch pipe of the required length to bring it to the surface of the ground and the pipe was finished off with a regular oil or gasoline fill-pipe cover. These appear in the fairways as no more objectionable than the irrigation valves. This type of cover is much cheaper than either the Buckner or the NIBCO drain-valve cover and in addition does not need a lock as protection against mischievous boys who like to fill these standpipes with rocks and sand. Around the valves we placed gravel more to prevent wash back of sand under the seat than to improve drainage as we found that forty-eight hours will take care of all dripping of the pipe in the fall. In heavier soils I am not so sure of this method although it is claimed if a big enough soak away using coarse gravel is made at each drain valve they will take care of draining even in clay soils. Needless to say this method is much less costly than piping off to the

side or the fairway and much less bother than having pump-outs.

In addition to installing the pipe two small pump houses have been built and two tanks have been located by these houses. In the spring we will install two Fairbanks, Morse 250 g.p.m., two stage, "built together" centrifugal pumps. This "built together" feature which is found in many makes of this type of pump makes a very compact installation and eliminates all troubles from lining up the pump and motor and slippage losses through shaft couplings.

The two tanks used are from the old system and are small so that for Greens and Tee watering we shall have to by-pass excess water back into the suction line. For small uses the system will be fully automatic and for fairway irrigation the demand will so nearly equal the capacity of the pumps that the tanks will operate only to shut the system down when the sprinklers are removed. We anticipate replacing these tanks with ones of proper capacity after a year or two.

What is the total cost to be? When the last bill is paid and several small related costs which were taken care of by individuals are taken into consideration my guess is that the cost will run between \$10,000 and \$10,500; but it is just a guess.

What is the operating cost to be? We will have an annual demand of \$115 and our energy charge will be 4c per KWH. Until after next season someone else will have to tell me what the operating cost may be.

What would I like to do or have done differently if I ever have another system dropped into my lap to install? Granting the water supply presents no problem I would like to start off with a clean slate and a definite appropriation to have the system properly and adequately engineered. In other words get the whole project down on paper and work up the cost to a very close degree of accuracy and also, oh well! that will be the millenium and I venture to say that there would be few installations in the East if before a piece of pipe was purchased or a foot of trench was dug the club knew to within one or two percent what the actual cost of the installation would be and what the cost of operation would amount to.

"Controlled imagination is a great productive force."

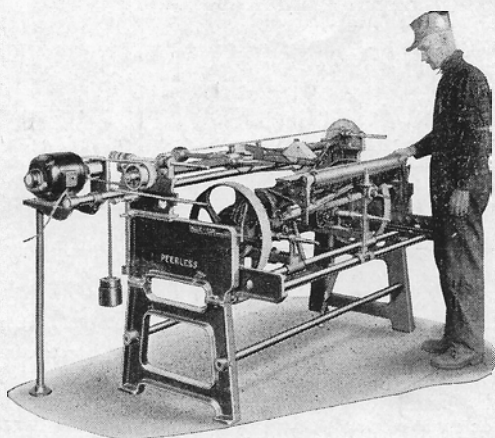
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