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MAY, 1933  
VOLUME VII—No. 5

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# The NATIONAL GREENKEEPER and TURF CULTURE

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Secretary

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Assistant Secretary

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## The Editor's Chair

SUPPOSE we reminisce for a few minutes on the general business and economic situation and how it affects the turf culture industry.

\* \* \*

THERE is no denying the fact that we have been in a fog and a fright for almost a year. Sales which were made have not been realized. Stagnation has sapped our resources. As a result we have "holed in" with a feeling of fear that everything was going to pot.

\* \* \*

THE truth is, as we see it, that we are more scared than hurt. The garbage man is clearing out the banking business and plenty of new, clean money is coming into circulation. In other words legitimate business is due to have its day and that right soon.

\* \* \*

SEVERAL things point to the above conclusion:

*First*—Inflation of our currency will put more money in circulation.

*Second*—The breaking down of the tariff wall will give us a world-wide market.

*Third*—The Federal Government has served notice on the bank moguls that their days of gambling and speculation with depositors' money are over.

*Fourth*—Riotous government expense is on the wane and the luscious days of political patronage are over.

*Fifth*—The Roosevelt administration is going to unscramble the monopolistic combine of large industries and give the ordinary and honest manufacturer a chance to get his share of sunshine instead of being shut up in a dungeon as he has been for three years.

THINGS are gloomy at best but we cannot help feeling that the old adage, "It's always darkest before dawn," is true at the present time. The big U. S. A. is too vast and too prosperous and too rich in natural resources to completely lapse into solitude. We must have confidence and courage to face the morning sun with a smile and say, "let's go."

\* \* \*

LAST month we talked quite seriously about the employment situation in the turf culture field—how an able man might need a job and a worried landowner might need his services.

\* \* \*

THE response has been spontaneous. Comes a letter from an old-time greenkeeper in New Jersey. "I read your editorial in the April issue and I think your employment plan an excellent idea and something that has been badly needed. I wish to thank you on my own behalf and also in behalf of other greenkeepers in my position for your interest in our welfare."

\* \* \*

OUR Employment Department which you will see in one of the back pages is going to grow by leaps and bounds. It is necessary, useful and economical.

\* \* \*

IT is the poor man's day in this whirling world. When he goes out early and comes in late he can feel that every hour's labor is an important cog in the nation's business. No longer a puppet to be played with, he stands with shoulders erect and courage in his heart because he recognizes his responsibility to his community and his country.

# The Unvarnished Truth

---

*I*T BEHOOVES one sometimes to speak the unvarnished truth. Especially in these times when the veneer is off the furniture.

The NATIONAL GREENKEEPER *and* TURF CULTURE has no affiliations with any trade interests or organizations which have an axe to grind.

While it may be a bit embarrassing to be so frank, we cannot help standing out in the open and telling our readers and advertisers that this magazine will be just 100% on the level as long as I am at the wheel.

You can believe every word we publish. Furthermore we shall do our best to clean out the bunk which has and still does infest the turf culture industry.

When any of you have anything to buy or anything to sell and are not dead sure, write in. I may know something.

*W. E. Somers*  
Editor.

MAY  
1933  
VOLUME VII  
NUMBER 5

# *The* NATIONAL GREENKEEPER *and* TURF CULTURE

*The only trade journal in the world devoted to the growing of fine turf grasses.*

## Budgeting the Golf Course

By R. E. (BOB) FARMER, *Greenkeeper*  
*Brynwood Country Club, Milwaukee, Wisconsin*

Reprinted from address delivered at the Annual Greenkeepers' Educational Conference in Chicago

A BUDGET is a financial estimate embodying proposals for the ensuing year as presented to or passed upon by a governing body. In the case of golf courses we must consider first that golf is a luxury in its true sense and if it were not for the popularity of the game due to the enjoyment and healthful benefits received from it, these depressing times we have had in the last three years would have brought entirely different reactions to those associated with the work.

It is appropriate and necessary for the greenkeeper to keep cost accounts and budget his work accordingly. A budget serves to guide the amount of money expended on each item and the cost-keeping of each operation helps to arrive at the required results. Budgets are warnings that there is only so much money to spend and they also remind us of the needs that we will require money for later on.

Many golf clubs have been reducing their yearly grounds budget 10% each year for the last three years in a vain effort not to over-spend their operating expense. Other clubs carried on with their usual budget until this year and then reduced by 15 or 25%. In order to have a working basis let us assume that my Green committee allotted me a \$10,000 appropriation for this year to work with. This will in no way intimate that grounds maintenance



*Bob Farmer takes the bull by the horns in his story on budgeting the golf course. Perhaps some will criticize his deductions, but no one can discount his courage.*

cost can be standardized on all golf courses, nor should it indicate any sample of cost accounting form, but it will, by setting up an actual cost of items and operations for one year on my course, represent a figure whereby I can budget for the following year. This way of budgeting is on the percentage basis and it is the only way each greenkeeper can estimate his expenditure consistently for the ensuing year. We can also assume this allotted \$10,000 appropriation is a 25% cut from the previous year. As an example I am showing in this paper a sample budget showing a 25% cut, making an annual expenditure

of the grounds amount to a \$10,000 budget for the following year.

### WHERE MONEY CAN BE SAVED

THE greenkeeper works from year to year studying the operations on the grounds and how they affect the budget. It is his duty to study the costs and how they fit into the annual expenditure. Many pointers are brought to light showing the advantages and disadvantages of budgeting. You will notice in the sample budget where the greens item is reduced about \$535.00. This amount is almost equivalent to one man's salary for a year and in order to meet the demand something drastic has to be done. Some of the greens on the 400-yard holes

SAMPLE OF A REDUCED GOLF COURSE BUDGET

Items and Operations	Actual Cost for a Prior Year	25% Cut	Amount to Spend
Greens	\$ 2,139.00	\$ 534.75	\$ 1,604.25
Tees	276.00	69.00	207.00
Fairways	1,061.00	265.15	795.85
Watering	882.00	220.50	661.50
Rough	467.00	116.75	350.25
Weeding	272.00	68.00	204.00
Outside Rough	459.00	114.75	344.25
Bunkers and Traps	705.00	176.15	528.85
Turf Gardens and Nursery	493.00	123.15	369.85
Seeds	619.00	154.75	464.25
Fertilizer	1,464.00	366.00	1,098.00
Chemicals	425.00	106.15	318.85
Gas and Oil	749.00	187.15	561.85
Repairs	1,552.00	388.00	1,164.00
Depreciation	990.00	247.50	742.50
Incidentals	780.00	195.00	585.00
Total	\$13,333.00	\$3,333.00	\$10,000.00
Total Labor	6,132.00	1,533.00	4,599.00
Total Material	7,201.00	1,800.00	5,401.00
	\$13,333.00	\$3,333.00	\$10,000.00

which are of good size may be cut down so as to eliminate mowing and topdressing expense. On a cost unit basis for the reduced areas a definite sum can be estimated toward the saving.

Some of the short hole greens may be cut down also if necessary. The proper fertilization of the grasses may make it possible to reduce the frequency of mowing. The texture of the grasses can be overlooked in extreme cases of this kind. Good selection of topsoil can help to eliminate some weeding. The kind of sand used for topdressing is an important feature also.

Tees are usually too small but since the number of players are decreasing at most clubs, a reduction of \$69.00 is almost negligible. Consideration should be given to the nature of the subsoil as this retards the growth of grass and slows up the time of re-pairing.

The acreage of the fairways is large and \$265.00 taken from that item means quite a little less to spend. Re-seeding and top-dressing is very important so the mowing item would have to suffer. When it only takes one man from ten to fourteen hours to mow fifty acres, one can readily see where the number of times the fairways would be mowed would be decreased twenty-five times. It is tragedy to mow the grass in the fairways short but complaints of lost balls are not pleasant to hear about.

WATERING SHOWS A CUT

THE watering operation includes greens, tees, fairways and sometimes the trees, shrubs and flowers. The budgets deducts \$220.50 from the sum of the year before. If the night sprinkler is paid 40c an hour there would be 551 hours less of time for work. This item would suffer considerably.

Roughs comprise from 30 to 60 acres and are usually cycled twice a year, or so, except on public and semi-public courses where the requirements are more stringent. The hay is usually raked in rows and hauled away but with \$116.00 less to spend it could be burned as it is wind-rowed. The hay may be also exchanged for manure and thus eliminate the costly expense of hauling.

The outside rough is that area beyond the 20-yard limit and among the trees and outer areas. Most of this expense is cycling, raking and generally cleaning up of fallen debris. Much depends on the number of storms as to appearance and a \$115 difference might be unnoticeable some years. Many clubs have a yearly supply of dead limbs and trees to be removed from these locations. Oftentimes this wood can be exchanged for services of the man and team who do the cycling of the tall grass.

It costs from 15c to 30c to rake a trap, depending on the size. To reduce this item \$176.00 would mean considerably less raking. The time for raking would become more important and would have to be neglected on quiet days.

Greens, tees, and sometimes approaches are supplied with sod from the turf nursery. It is essential to keep that up in first-class condition. In order to reduce the amount on this item the turf nursery would have to be neglected.

Seeds, fertilizer chemicals, gas and oil, depreciation and incidental items are all tangible and can be reduced according to the money allotted for such.

GOLF MACHINERY MUST BE KEPT UP

THE repairs item can't very well be reduced \$388.00 as it is necessary to keep the golf machinery in good working order, nor can the repairs to barn and painting be neglected. The golf equipment such as tee boxes, ball washers, poles and flags, etc., must be maintained in the usual manner.

Nothing is said of the construction item because a separate fund is usually created for this expenditure. Old construction work can be charged to that item which it concerns.

One of the chief advantages of budgeting in this manner is the finding in the course of a year's work, that savings in some of the items and operations can be made while in others none can be made. Altogether the savings will approach your budget very closely and one can readily see how and where to budget for the following year.

More initiativeness and ideas as to how and where the total appropriation can be met will be developed. The efficiency of the organization will be reflected from the greenkeeper on through his men. Reduced budgets, if extreme, can only be exercised for a year or so until the condition of the course is such that the members as a whole become dissatisfied.

Most of the greenkeepers have always operated their courses very efficiently and any reduction of the total appropriation works a hardship on them. Good managers will keep the general appearance of the course good through the playing season, but even so, the principal parts of the golf course are neglected.

#### REDUCED WAGE SCALE IS DISADVANTAGE

**T**HE reduced scale of wage that is being adopted generally among golf courses works to a disadvantage. Experienced men do their work more efficiently and quickly than inexperienced men. It takes care and time to train new men. This is especially true where many golf clubs are reducing the working hours by laying off their men three half-days a week.

The forces of nature affect the budget very much. The weather can almost be called the barometer of your budget. Rainy seasons increase the mowing items considerably. All mowing equipment is kept busy at such times. The reverse is true if it is dry, but then your watering operation is doubled. Territorial location has much to do with the diseases that visit the golf courses. Wooded golf courses favor insect migration, so these obstacles all work against any form of budget and are utterly impossible to forecast.

Many greenkeepers will be forced to spend their appropriations more carefully whether they are taking care of an old course or a new one. Due to budgets being slashed it will take longer to bring a new course into good condition because of the more

cautious methods of spending, but good results can be obtained by a gradual scheme of building up.

Six fairways can be fertilized and topdressed each year. Some of the trees can be fertilized, pruned and treated every year. A quantity of sand can be put into the traps each season. A just amount of depreciation of machinery can be charged off yearly. Some funds should be set aside for old and new construction work. A green might need re-modeling or some new trees should be planted. Such a gradual development of improving your golf course will fix a standard budget each year. It will help to do away with deficits and overspending. What is saved on each year's budget can be set aside for depressing times such as we have been going through.

Now that we are going through an era of depression golf, I believe many golf clubs will allot certain amounts for each phase of operation. Maximum maintenance methods only open the road for a change in administration. Oftentimes pirate managers come into charge and capitalize on these maximum conditions by reducing costs for a year or two only on the grounds. The glory is credited to the acting regime instead of the ones who built the golf course up to its splendid condition.

## The Lawn

BY LAWRENCE S. DICKINSON

Ass't. Professor of Horticulture  
Massachusetts State College

Defines and Describes the Culture of  
Turf in Park, Golfing and Home areas.

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The General View	Controlling Pests
Molding the Lawn	General Maintenance
Preparation of the Seed Bed	Lawn Mowers
Seed Selection and Planting	Park Turf
Important Turf Plants	Cemetery Turf
Planting a lawn with Stolons	Useful Tables
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Cleveland, Ohio

# The Seed Bed of a Lawn

By PROFESSOR LAWRENCE S. DICKINSON

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THE seed bed of a lawn is really the top soil or loam, and like any good bed it has three layers: (1) the top inch, or bed clothes; (2) the next two inches in depth, or mattress; and (3) the remaining depth, or bed spring; all of which are essential to the comfort and health of the occupant. These layers are particularly important to grass plants, because not only do they act as a seed bed, but they must nourish the young grass plants through its youth, and then maintain it through the vigor of life and dotage 'til death.

Therefore the seed bed should be of such texture as to permit easy development of a root system, and contain a quantity of the chemical elements necessary for plant life. It should also contain at least twenty-five per cent of voids or air spaces; plenty of moisture and yet not be wet, and be prepared for occupancy in either the spring or fall seasons.

To meet the requirement for the physical properties of an ideal topsoil; one must have a loam reasonably rich in organic matter or humus and containing from 15 to 20 percent of clay, 45 to 50 percent of silt and the remainder sand. Such a topsoil is not difficult to obtain if properly managed, although one usually has to start with a topsoil that will fall under one of the following classifications: sandy, sandy loam, clay loam, or clay.

The doctrine that good construction makes for low cost of maintenance is particularly adapted at this point in the building of a lawn. Home owners, and particularly contractors and real estate agents, in their haste to get "a lawn" saddle themselves, or their customers with a lawn area that will give chronic trouble, or require an expensive operation



PROF. LAWRENCE S. DICKINSON  
*Massachusetts State College*  
*who is recognized internationally as an expert on turf culture. We are greatly privileged to publish excerpts from his wonderful book.*

because of poor construction. For many reasons it is not wise to permanently plant a lawn as soon as the "new house is finished" or grading completed, even though it should be properly molded. Workmen planting the shrubbery, and doing the many "last things" about the new house will leave permanent memorials, in the form of worn and excessively packed spots all over "the new lawn." Furthermore in one season poor soils can be made much better, and unevenness smoothed, so that a truly permanent lawn can be planted.

Many subdivisions are being made on land that is either very sandy or very clayey. On such topsoils no attempt should be made to plant a lawn until the area has been cover-cropped. Cover-cropping means to grow a crop for the purpose of plowing it in before maturity, thereby improving the soil both as to texture and food content. As before intimated, cover-cropping is very beneficial to both sandy and clay soils, even Cape Cod sand has been made to produce good turf after two seasons of cover-cropping.

## SPRING PLANTING IS FATAL

IT SURELY is a great temptation, when one moves into a newly-built house May 1, to immediately "plant a lawn." Yield not! Grow cover crops and plant in the fall. If the lawn is molded and ready for seeding in the spring it should be cover-cropped with rye or oats sown thickly. This crop should be shallow-plowed in the latter part of June, and the area seeded to buckwheat at the rate of three pecks per acre. The buckwheat should be plowed in while the stalks are green and succulent (about Septem-

ber 1 for the Northern latitudes) and the ground permitted to remain fallow for about two weeks.

It should then be prepared for seeding. If the area is not ready until mid-summer, grow only one cover crop, and if it should be fall before any work could be done on the lawn area, sow winter rye to plow in early spring to be followed by two more cover crops. If the soil contains over twenty-five percent clay, one application of lime at the rate of fifty pounds per one thousand square feet of surface will be of great benefit.

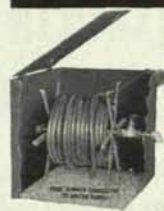
On soils capable of growing a fair vegetable garden cover-cropping need not be practiced, but it is very necessary on sandy or clay soils. In all cases the seed bed should be fully prepared in the fall, if possible in time for fall seeding and if not for spring seeding on the "honey comb," when the top is thawing and freezing.

All soils are improved by the addition of manures, and often they can be substituted for cover crops. The only factor against the use of manures is their unknown weed seed content. However, this liability need not be very serious if the manure is applied several weeks before seeding time, for a great majority of the weed seeds will have germinated and the young plants will be destroyed in the final preparation of the seed bed. It is far better to harrow the manure into a lawn surface than to plow it in.

#### PREPARING THE SEED BED

**I**N preparing the real seed bed (bed covers) the molded lawn should be thoroughly harrowed or shallow spaded. Grade strings should then be re-strung and the entire area raked with iron rakes. This raking should not only remove stones and debris, but should smooth out any unevenness and round off all sharp corners caused by abrupt bending of the grade lines. The raker should be cautioned to do as much "pushing" as "pulling" with his rake, otherwise there will be an excessive accumulation of loam at the lower part of the area.

Experience teaches (though it is seldom practiced) that it is better to rake up the slope than down it, for the same reason. As soon as this raking is completed and the area appears ready for the seed, roll the area with a medium heavy roller. Unexpected hollows and hills will appear, lumps of earth will be crushed and the temptation to seed after the first raking is alleviated by the obvious necessity for another raking. This raking, the final



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one, should be done with a wooden lawn rake. It should effectually smooth the surface and loosen the soil to a depth of at least three-quarters of an inch, leaving a soft, open clean and thoroughly pulverized seed bed.

If one desires to use a pre-seeding fertilizer other than the manures, super-phosphate at the rate of sixteen pounds per one thousand square feet will be found to be very helpful to the young grass plant. This should be incorporated into the soil with the first raking.

## Golf Course News

A column of information brief and accurate.

Items are welcome and will be published.

#### NEW ENGLAND NOTES

By GUY C. WEST

**G**OLF in New England this spring has been largely very dependent upon the weather. Following a rather open winter when most courses used their regular greens at all times, April brought a very excessive rainfall, and the result was flood conditions, with many courses suffering from flooded lowlands, soggy fairways, etc.

The "No Play" signs were hung out in many clubs due to these wet conditions, and even the best of drainage facilities were taxed on all clubs.

The Greenkeepers' Club of New England held its last indoor meeting of the season on April 3 at the Hotel Statler, Boston. Dr. Howard B. Sprague of the New Jersey Agricultural Experiment station was the speaker, and explained interestingly the various experiments conducted recently and the results obtained from them.

The annual Field Day for greenkeepers at the Rhode Island State College will be held this year on May 22. Exhibits will be limited to the small equipment. A trip to the experimental plots and a speaking program following lunch will complete the program.

Arthur W. MacLean, formerly assistant greenkeeper at the Kernwood Country Club, Salem, Mass. has recently been appointed greenkeeper at the Brattleboro Country Club, Brattleboro, Vt.

(Continued on page 14)

# Bettering Maintenance At Small Town Golf Courses

By V. T. STOUTEMYER, *Department of Horticulture,  
Iowa State College, Ames, Iowa*

Reprinted from address delivered at the Annual Greenkeepers' Educational Conference in Chicago

THE ancient and honorable game of golf has now become as well established in American life as ham and eggs or Boston baked beans. Golf doubtless has a wider adaptation to people of all ages and classes than most other sports. This explains the rapid spread of the game in the last two or three decades. Wherever the golf bug bites, it bites exceedingly deep and leaves its usual quota of bereaved wives and fatherless families.

While golf has had its largest development in metropolitan districts, there is a strong and growing interest in the smaller towns. The accompanying table shows approximately the present distribution of golf courses in the smaller towns of Iowa, a typically rural state. This list was compiled during the past year and includes regularly organized golf clubs for the most part, with a very few fee and municipal courses. Undoubtedly a number of clubs were overlooked in this survey.

Thus it may be seen that a considerable number of golf courses are found in towns with a small population. It would be erroneous to imagine that very many of these courses are still in the cow pasture stage. A few, it is true, have sand greens and perhaps charge an annual fee of \$10.00 or \$15.00. As a rule the small courses are not operated very long before several grass greens are installed. Eventually the sand is replaced entirely by grass.

Cost studies are of little value in this period of change, but it may be said that during the past few years many small 9-hole clubs have been providing bent grass greens and fairly good playing conditions with some clubhouse facilities for dues of about \$25.00 or \$30.00 per year. Wherever the mainte-



*Professor Stoutemyer has most intelligently analyzed a subject of nation-wide importance. His investigations are sound and his facts ring true. We recommend him without reservation.*

nance is on a somewhat higher level or where the clubhouse facilities are more elaborate this figure may be doubled. These dues, of course, are very small in comparison with those of some of the larger clubs.

## CLUBHOUSE HAS PROVED COSTLY

ONE question which every small town club has to face is the relative prominence which shall be given to golf and to the clubhouse with the usual social activities that cluster around it. Satisfactory golfing facilities may be secured for a very modest sum in the small community, but very often the clubhouse facilities

prove excessively costly for the small golf club.

## DISTRIBUTION OF GOLF COURSES IN THE SMALLER TOWNS AND CITIES OF IOWA

Population Range	Number of Towns in State	Number of Towns Having One or More Golf Courses
500- 1,000	196	13
1,000- 1,500	66	28
1,500- 2,000	30	14
2,000- 3,000	34	24
3,000- 4,000	20	20
4,000- 5,000	16	13
5,000-10,000	15	15
Totals	377	127

In some cases during the past season the greenkeeper's budget has been reduced drastically, while large expenditures have been continued for clubhouse equipment. Possibly this trend is the result of a real demand by the membership for the improvement of the clubhouse as a social center. Nevertheless, there are many clubs which would have larger memberships today and be in better financial condition if they had maintained good greens and fairways and had spent less on high-priced crystal and chinaware. If this be true, perhaps the greenkeep-