

ELMER F. AFFELDT

Treasurer

Metropolitan Greenskeepers' Assn.

Greenskeeper

Glen Oaks Golf Club, Great Neck, L. I.

Yountakah Country Club, Nutley, N. J.

Country Club of Virginia.



says of NU-GREEN:

AFTER testing NU-GREEN conscientiously for the last three years, I find nothing that can take its place in quickly bringing a green back after an attack of Brown-Patch. For ease of application and results, there is nothing, to my mind, that can take the place of NU-GREEN."

Scientifically correct in theory, Nu-Green has proved, in actual practice, a consistent and dependable performer—as Mr. Affeldt, and many other prominent greenskeepers, have been glad to testify.

Through its remarkable fungicidal properties, Nu-Green prevents and controls Brown-Patch absolutely. At the same time, Nu-Green brings to the weakened grasses the nutriment and stimulation needed to restore them quickly to normal health and vigor—and keeps them so even in the most trying weather.

Dr. J. J. Monteith, Jr. in the December, 1927, issue of the Bulletin of the U. S. Golf Assn., Green Section, says of NU-GREEN:

"The areas treated with Nu-Green soon developed a luxuriant, dark, healthy green color, which stood out in sharp contrast, to the untreated portion, where the turf retained the pale yellowish cast so common on many greens. In cases, these plots were so striking that they became a source of wonder and amazement to greenskeepers, professionals, club officials, and players."

Write for the NU-GREEN Booklet



Note—New Prices

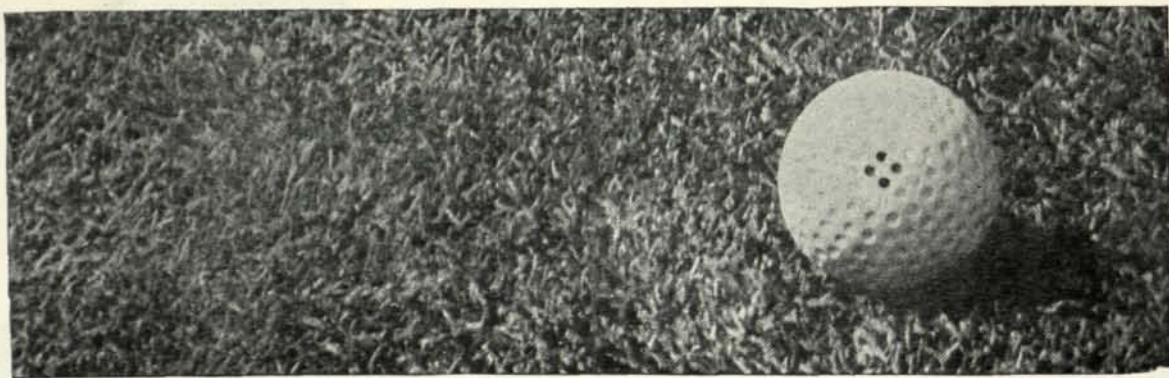
25 lb. size	\$1.50 per lb.
50 lb. size	\$1.45 per lb.
100 lb. size	\$1.40 per lb.

NU-GREEN

Controls Brown-Patch

THE BAYER CO., Inc., Agricultural Dept., 117 Hudson St., N. Y. City

Say you saw the ad in The National Greenkeeper



A Piece of Cocoos Bent Turf

For Your Fall Work, whether in connection with renovating or new construction, late summer or early fall (Aug. 15th to Oct. 1st) is by all odds the best time to sow seed.

Because of the extreme fineness and beauty of turf produced from **Bent Seed**, we recommend the use of a certain percentage of Bent in all mixtures for *Fairways* and *Lawns*. Its superiority for use on golf courses, especially the putting greens, has long been recognized.

For Early Fall Sowing, We Offer

Grass Seed

of Known Quality

TESTED for PURITY and GERMINATION

South German Bent Colonial Bent Rhode Island Bent (*Washington Grown*) Bent Stolons

Prices on the above, or any other turf producing grasses, such as *Fancy Red Top*, *Kentucky Blue*, *Chewing's N. Z. Fescue*, *Sheep's Fescue*, *Poa Bulbosa*, *Bermuda Grass*, etc., upon request.

COCOOS BENT We are now convinced, after several years of trials in the different sections of the United States, other than the Pacific Coast, where it is already recognized as the outstanding Putting Green Grass, of the fine turf producing qualities of this Creeping Bent. Use Cocoos Bent Seed for your new greens or work it into existing greens, or wherever a fine and enduring turf is desired.

Per lb. \$2.50, per 10 lbs. \$22.50, per 100 lbs. \$200.00

Special Putting Green Bent Formula — Consists of imported and domestic grass seeds of the highest quality, that will produce a fine, uniform and enduring turf. Use 15 lbs. to 100 sq. ft., one-quarter to one-half this quantity for renovating 10 lbs. \$8.00, 100 lbs. \$70.00
Standard Putting Green Formula, 10 lbs. \$7.00, 100 lbs. \$60.00

Superfine Fairway Formula (with Bent) — Contains Bent Seed, as well as Kentucky Blue Grass, Superfine Red Top and Chewing's N. Z. Fescue. We adapt it to your conditions so that a uniform and enduring turf is secured 25 lbs. \$13.00, 100 lbs. \$50.00
Fairway Formula, Fine Quality, 25 lbs. \$10.00, 100 lbs. \$35.00

Special formulas for Tees, Rough, Bunkers, Polo Fields, Airports, Club or Private Lawns, furnished upon request

Remember:—All our seeds are of the highest quality, obtained direct from the most reliable sources of supply and are botanically true to name. All seeds are new and are cleaned and re-cleaned until they are brought up to the highest possible state of purity and germination, special care being given to the elimination of weed seeds.

NOTE—As prices on a number of turf producing grasses have already advanced and are liable to advance further owing to short crops, we advise early ordering for Fall requirements.

Stumpp & Walter Co

Specialists in Golf Grass Seeds and Equipment
30 and 32 Barclay Street New York City



The Author in Her Laboratory

Seeds For Golf Courses

An expert's analysis of grass seeds which produce fine golf course turf. Origin and characteristics of the several varieties most generally sold by seed merchants

By E. E. PATTISON, Director

International Seed Testing Laboratories, No. 11 Park Place, New York City
Formerly Seed Analyst U. S. Department of Agriculture, Washington, D. C.

Article IV—The Poa Family of Golf Grasses

This remarkable and exclusive series of articles on grass seed is creating nation-wide comment. It is the first time that knowledge of the seed business has been broadcasted. Previous installments cover Rhode Island bent, velvet bent and seaside bent. Next month, the fescue grasses.

THE genus poa contains over 100 species but there are only six of interest to the golf world. The following are the six species:

- Poa pratensis*—Kentucky Bluegrass
- Poa compressa*—Canada Bluegrass
- Poa trivialis*—Rough Stalk Meadowgrass
- Poa nemoralis*—Wood Meadowgrass
- Poa annua*—Annual Meadowgrass
- Poa bulbosa* (no established common name).

Kentucky Bluegrass (*Poa pratensis*)



Poa pratensis

Kentucky Bluegrass is of course the most important of the six enumerated above. It is indigenous in the North and West of the U. S. Some years ago the major

producing section of Kentucky Bluegrass seed was the state of Kentucky from which it got its name, but during the last few years Missouri has been giving Kentucky a race for the supremacy. During the last two years the quality of Kentucky Bluegrass seed raised in Missouri has been far superior to that raised in Kentucky.

Kentucky Bluegrass is by far the most popular grass for fairways and lawns. It also has its use as a pasture grass, but this use will not be discussed in this article.

For both fairways and lawns, the seed is usually combined with seed of other grasses, principally Redtop. A favorite fairway mixture for the territory East of the Mississippi and north of the Ohio river is as follows:

40% Kentucky Bluegrass, 30% Fancy Redtop, 30% Red Fescue. A mixture such as this should be sown at the following rate per acre—150 pounds minimum, 250 pounds maximum.

The weight per bushel of the standard commercial quality is 19 pounds, but heavier seed is recommended for golf purposes. The following table will show the approximate purity and germination of the various per bushel weight seed:

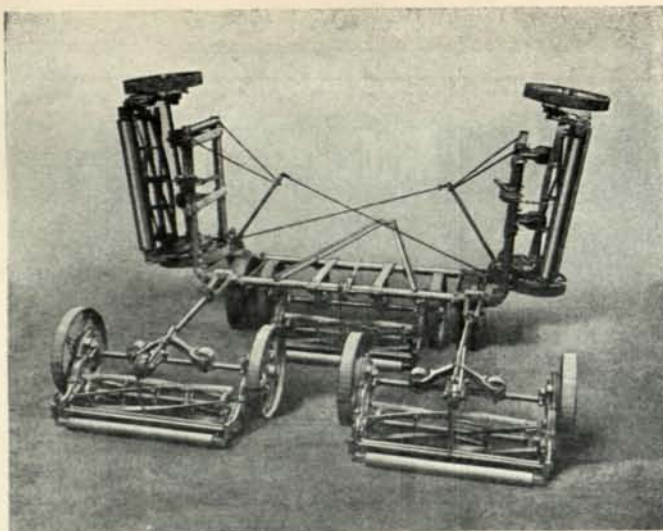
Weight	Purity	Germination
19 pound seed	75%	75%
21 pound seed	85%	85%
24 pound seed	90%	85%
27 pound seed	95%	90%

During the last year the wholesale price of 21 pound Kentucky Bluegrass averaged \$19.00 per 100 pounds but the coming price for the new crop will be very much higher due to the fact that the yield this year both in Kentucky and Missouri will be approximately only one-fourth as large as last year. It would not be surprising if the average wholesale price of 21 pound Kentucky Bluegrass would be in the neighborhood of 35 cents per pound.

Kentucky Bluegrass thrives best in limestone soil and is not adapted at all to acid soils. A trained and efficient analyst has no difficulty in distinguishing the different species of Poa even though a great many of them look exactly alike to the untrained eye.

The seed of Kentucky Bluegrass is dark, golden, brown in color, being much darker at the base. The glume is distinctly nerved, and the general form of the seed is boat-shape. It is easily confused with *Poa trivialis* (Rough Stalk Meadowgrass), but can be distinguished under the microscope by an examination of the hairs of the palea. The hairs on *Poa pratensis* (Kentucky Bluegrass) are coarse, while the hairs on *Poa trivialis* (Rough Stalk Meadowgrass) are fine.

The United States is a large exporter of the seeds of Kentucky Bluegrass to United Kingdom and Germany.



A Special Midsummer Price Reduction of 10%!

On all orders received for any of the PENNSYLVANIA Fairway Mowers during July and August—the time of the year when Greenkeepers must face the facts of their Greens Budgets—a special discount of 10% will apply for payment within ten days of shipment.

Following are the PENNSYLVANIA Quality Mowers included in this offer, with the respective regular prices against which the special discount will apply for these two months only: tractor-drawn "NEW" Fairway Quint, (as pictured above) \$625; tractor-drawn "NEW" Fairway Trio, \$375; horse-drawn "NEW" Fairway Trio, \$400; tractor-drawn SUPER Fairway Quint, \$725; tractor-drawn SUPER Fairway Trio, \$450—all f.o.b. Philadelphia.

Write for complete details and for SPECIAL GOLF CATALOG.

PENNSYLVANIA LAWN MOWER WORKS
1645 North 23rd Street Philadelphia, Pa.

PENNSYLVANIA

Quality

LAWN MOWERS

Greenkeepers Attention! A NEW ARISTOCRAT High Speed Cylinders— 19" Size Only

Under the terms of a SPECIAL INTRODUCTORY OFFER, we will ship you, transportation prepaid, for 30 DAYS FREE TRIAL, a NEW, improved model of the world-famous ARISTOCRAT—the "old reliable" PENNSYLVANIA GOLF high wheel greens mower—either with or without grass box.

At the end of the trial period, you may return the mower freight collect or we will allow a special discount of 5% for payment within the 30 days time. Price of NEW ARISTOCRAT, \$40. Grass box (if ordered) \$8.00. One mower only to any Club in this offer.

Canada Bluegrass

(*Poa compressa*)



Poa compressa

As the common name implies, the principal source of this seed is Canada. There is some little seed raised in the state of New York, but the amount is not appreciable, and

the quality quite inferior to the seed of Canadian origin. This grass compares in no way with our Kentucky Bluegrass, especially on the limestone soils, but in parts of our country where it is too humid for Kentucky Bluegrass to thrive, Canada Bluegrass serves as the best substitute.

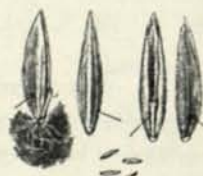
Canada Bluegrass seed is usually much cheaper than Kentucky Bluegrass, and in the days before seed analysis and seed laws, it was a common thing to find Kentucky Bluegrass heavily adulterated with Canada Bluegrass. Nowadays this adulteration is not practiced, in fact the only case of adulteration which we have seen in recent years was one that was entirely unintentional.

The plant is smaller than that of Kentucky Bluegrass, and the seed is of an entirely different color and texture. Canada Bluegrass seed is light straw colored, and when it is not possible to make a determination on the color and shape (the seeds are usually quite flaring) a determination can be made by microscopically examining the hairs of the palea. These hairs on Canada Bluegrass are quite fine and extend to the tip. On account of the color the seed of Canada Bluegrass is more easily confused with *Poa nemoralis* (Wood Meadowgrass), but as the rachilla of Canada Bluegrass is naked and the rachilla of Wood Meadowgrass exceedingly pubescent, a determination is easy.

The average purity of Canada Bluegrass is 90% and the average germination 90%. If Canada Bluegrass is adulterated at all it is usually adulterated with Timothy. The average wholesale price of Canada Bluegrass during the past year was 15 cents; the coming price will be higher principally because of the higher price of Kentucky Bluegrass.

Rough Stalk Meadowgrass

(*Poa trivialis*)



Poa trivialis

All the seed of Rough Stalk Meadowgrass used in this country is imported. The principal producing country is Denmark. It is used principally as a

shade and tee grass. The reason for using it on tees is

Say you saw the ad in *The National Greenkeeper*

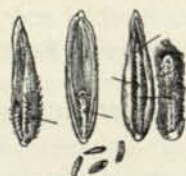
because it is considered much tougher than its sister—Kentucky Bluegrass. There is a greater use for it in England than there is in this country, due to the fact that England has no native grass such as our Kentucky Bluegrass.

The plant is not quite as large as the plant of Kentucky Bluegrass, but is larger than that of Canada Bluegrass. The seeds are strongly nerved, and as remarked above are very much like the seeds of Kentucky Bluegrass. Rough Stalk Meadowgrass is more metallic looking, having a distinct glistening appearance.

Both the purity and germination of Rough Stalk Meadowgrass is usually above 90%. The average wholesale price during the past season was around 30 cents, but the price will be much higher during the coming season.

Wood Meadowgrass

(*Poa nemoralis*)



Poa nemoralis

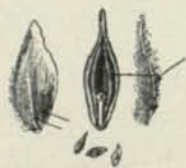
This is considered the finest shade grass we have. The principal producing section is in Southern Germany. The golf world uses very little of this seed, most of the

imports finding their way into the commercial "Shady Lawn" grass mixtures. It would be well, however, if the courses having unsightly bare spots under and around trees, would take to using both Rough Stalk Meadowgrass and Wood Meadowgrass, to correct this unsightliness.

The plant is somewhat smaller than Rough Stalk Meadowgrass. We have already spoken of the seed characteristics. The average purity is 85%, the average germination 80%. The wholesale price during the last season was in the neighborhood of 40 cents, but like all the rest of the grasses the coming price will be much higher.

Annual Meadowgrass

(*Poa annua*)



Poa annua

The golf world has heard much of Annual Meadowgrass during the last two years, in fact so much enthusiasm has been worked up that there is now an

actual demand for seeds of this species. The writer is not at all in sympathy with this demand, and looks upon Annual Meadowgrass as a troublesome weed. While *Poa annua* is very common in this country, what little seed there has been on the market has been imported. Most of it is a by-product from the reconditioning of Ryegrass, and for this reason it usually contains a rather high percentage of Ryegrass.

Last year one of the golf courses considered them-



for Fall Fertilizing

Every season's play on a golf course removes a certain percentage of the elements essential to plant growth. Thus it becomes necessary to replace such elements if satisfactory turf is to be expected the following year.

One of the easiest and surest ways of replenishment is to use Bestivall, Nature's Own Fertilizer.

This is a product of quick assimilation, making it an economical and effective means of fostering plant growth.

It is a finely pulverized fertilizer, and all organic. Its analysis shows 7% ammonia, 3% phos. acid and 1% potash.

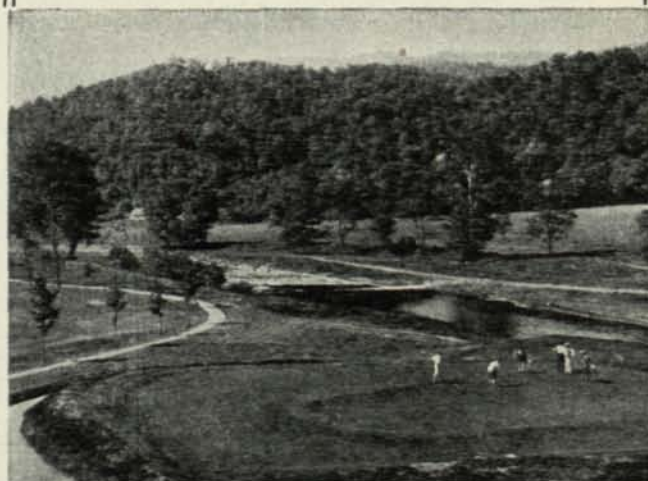
One of America's foremost chemists pronounces the advantages of Bestivall equal to those of Peruvian Guano, which is generally recognized as the peer of all natural guanos.

THE

Bestivall Manufacturing Company

1900 So. Delaware Ave.

Philadelphia



BESTIVALL MAKES A HARDY TURF FOR PUTTING GREENS, GIVING A DEEP, RICH, VELVETY, GREEN COLOR.

Unexcelled for fertilizing new seedings

selves exceedingly fortunate in having obtained some seed of Annual Meadowgrass which they immediately used for the planting of their green. This seed was totally unfit for such purposes as it contained beside 15% Ryegrass, 5% weeds, many of which were most harmful.

Annual Meadowgrass makes a very good showing in the Spring, but later on bare spots develop due to its dying out. The plant is easily distinguishable. It is a low-spreading, tufted annual with soft, light green foliage. The panicles resemble Kentucky Bluegrass, but the seed is easily distinguished. The seed is shorter, fatter, and very pubescent.

Poa Bulbosa



Poa bulbosa

We have left the discussion of *Poa bulbosa* to the last because it plays a very minor part. There are some seedmen making a specialty of these seedheads, so that

they can be obtained if the purchaser is willing to pay the price. It is thought that this species will play an important part in the South and the most conspicuous example of *Poa bulbosa* turf is in the Capitol grounds at Richmond, Virginia.

Our next article will be on the Genus Fescue.

Your Grass Seed

Much of the Grass Seed that is sold today is supplied to the final, retail trade by large wholesalers. There are comparatively few houses that make their own importations, and of these few firms, Peter Henderson & Co. are an outstanding example.

We have always believed that there is a demand for the highest grade of Grass Seed—Grass Seed that could be depended upon, and the results have fully justified this belief.

Use Henderson Seeds for at least a portion of your course this year. Let us quote you on your requirements, and you will be surprised to find that the prices for seeds of Henderson quality are about the same as you have been paying, but with a vast difference as to results. An inquiry does not obligate you in any way.

PETER HENDERSON & CO.
SEEDSMEN

Everything for the Golf course

35-37 Cortlandt St.

New York City



Unexcelled for FALL Fairway Fertilization

MILORGANITE is the ideal Fall Fertilizer

1. Produces denser heavier turf before winter.
2. Is not lost by leaching during winter and spring, so benefits extend into following season.
3. Supplies available nitrogen early next spring thus promoting early growth.
4. Easily and quickly applied.
5. Absolutely free from weed seeds.
6. Will not burn turf.

Increasing numbers of golf clubs realize the benefits accruing from fairway fertilization. They find it easier and cheaper to improve thin turf with fertilizer than with seed alone.

Let our Soil Technologists help solve your problems. Their assistance can be obtained by addressing

The Sewerage Commission
508 Market St. Milwaukee, Wis.

Begin fairway improvement this fall by applying MILORGANITE in time to take advantage of favorable weather and early rains.

Beautiful Shawnee

A glimpse of this testing championship course on the Delaware

By Robert E. Power

Editor, The National Greenkeeper

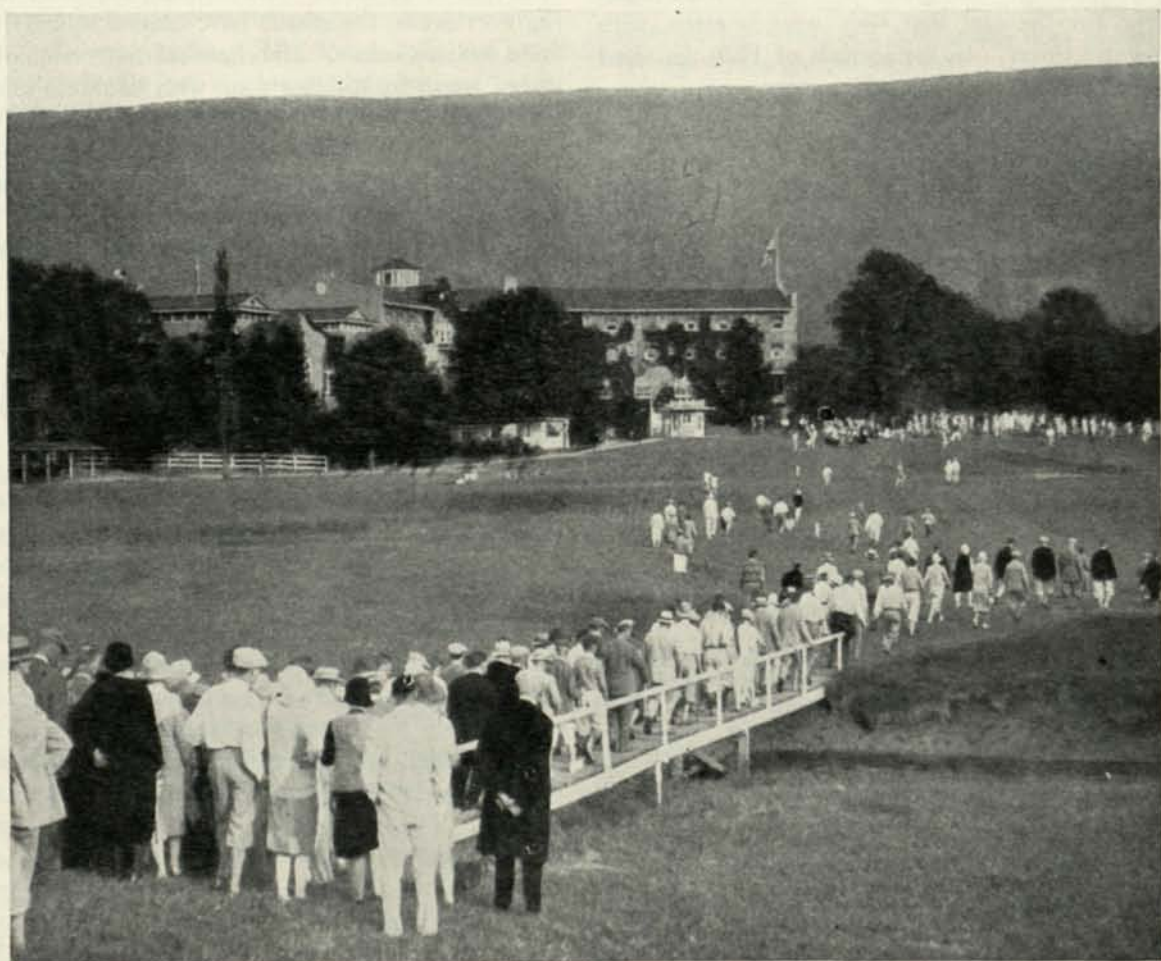
SHAWNEE is beautiful. I spent two days in this garden spot on the Delaware at the invitation of the Worthington boys who every summer stage an open golf tournament for the Shawnee Shield. As the news writers have long ago stated, Willie MacFarlane the scholarly professional from Oak Ridge won this distinguished honor.

But as usual I was more interested in the golf course than the play. Words are inadequate to describe the marvelous turf on greens and fairways. The much coveted velvet and carpet bents grow in great stretches through the green and except in top dressing and close cutting, are in very many places equal to the putting greens. I have never seen a golf course with so many fine bent grasses on the fairways. My only criticism was a considerable growth of clover in spots though the turf grasses seemed to be established in the clover places which served to keep the ball well up for hitting.

All but three holes of the present Shawnee course are on an island—an alluvial deposit of rich sandy loam. The bordering branches of the Delaware river make drainage simple so that turf conditions are ideal.

The putting greens are of seeded bent with some trace of poa annua and also an occasional showing of fine clover. They putt and hold the shots wonderfully well. I did not see a really difficult lie except once when Boomer was in a divot hole, nor a putt go astray. Which is almost one hundred percent recommendation.

Shawnee was designed and built under the personal supervision of its present owner, Mr. Charles C. Worthington. The fact that no one broke 70 in the recent open tournament speaks adequately of its championship qualities. The greens are tightly bunkered and the tee shots must be long and accurate.



Going to the 18th, Shawnee Country Club, Shawnee-On-Delaware, Pa.

How Canada Fights Weeds

Chemical sprays have proved effective. Crab grass most noxious weed

By C. A. Tregillus

AMONG the most noxious of turf weeds, omitting *Poa annua* from consideration, is crab grass. This perennial nuisance seems to be going as strong as ever even on courses where eternal warfare is waged against it. Attacking the menace as soon as it appears has done much to lessen the period of its continuance. Hand picking where it can be afforded, is done, and at other times success has attended the very close cutting of the turf after allowing it grow a shade longer than usual.

Chemical sprays have proved effective on weedy greens, particularly for the destruction of creeping weeds as chickweeds and dutch clover, and for weeds with fleshy leaves. While it is understood that this practice is not feasible to the south on account of the injury to the turf, still in the east, west, and central portions of Canada, it has worked out very well.

How One Course Killed Weeds

THE experience of one course in this connection is worth repeating. The greens in question were excellent except for the fact that they were overrun with chickweed and clover. In the autumn of 1926 the weed

patches were sprinkled with a lawn sand mixture made up of 50 per cent sand, 25 per cent iron sulphate and 25 per cent ammonium sulphate, made up on the premises. This mixture was put into small cans with holes punched in the lids and shaken over the noticeable spots. Three or four days later the whole green was sprayed at high pressure, with iron sulphate solution one and one half pounds of sulphate to one gallon of water. This blackened the green considerably and left ugly marks where the weed patches had been but did not hurt the grass to any extent. When a rain followed shortly after treatment it was repeated. Within two or three weeks in normal weather the green recovered its natural hue and the bare patches left by the weeds were rapidly growing in with good turf.

On some greens a second treatment was given, when some weeds showed signs of returning life. Two greens were re-treated in 1927 by spraying only because some small plants of clover were noticed, but other than that slight evidence, the greens have been absolutely clear of these noxious weeds. The chemical destruction of fleshy-rooted weeds by stinging them with sulphuric acid is also practiced in Canada.

Pests, as worms and ants, continue to make trouble one way or another, and it is comforting to know that the efforts of research and experiment in both Canada and the United States, by technicians and practical greenkeepers, are becoming more and more successful in eliminating this source or trouble.

Greenkeeping Methods Same As In U. S.

REGARDING the methods of greenkeeping in the Dominion, they do not vary much from the practice observed on courses in the United States. The average staff employed on 18-hole courses range from ten to twelve. This seems to be the number required to perform the basic operations and to maintain the course in a condition that reflects pride upon the members. Some courses, by reason of their layouts and the extensiveness of their grounds, require more than this number to do a good job. The equipment is standard, largely of American manufacture, though there is a sprinkling of English-made machinery in addition to the Canadian. It is gratifying to note that a close association exists between the workers on both sides of the line. The functioning of the National Greenkeepers Association will do much to bring about a close sympathy among all members of this profession wherever their work may take them, and it is the writers hope that he will see its continued development, and he takes this opportunity to extend to it his most earnest wishes for its abiding success.

GOLF KING No. 6

The sprinkler that Efficiency, Economy and sound business judgment demands. It has the slowest motion and is positive in action on fluctuating pressure, in wind or on hillside and is without a single whirling or fluttering part to get broken off.

Price on roller stand $\frac{3}{4}$ " conn. \$10.00. 1" conn. \$15.00. Larger sizes $1\frac{1}{4}$ " or $1\frac{1}{2}$ " conn. \$20.00.

The only sprinkler that can be used on **HOSELESS SYSTEM** with **SNAP VALVES** without "drowning" the attendant. Write us for full literature on **SNAP VALVES** which eliminate all control valves, all hose, all service leads and more than 50% of irrigating cost.

BUCKNER MANUFACTURING CO.
FRESNO, CALIFORNIA

The Greenkeeper and the Bookkeeper

Some of the problems relating to maintenance costs and their distribution.
Author tells greenkeepers at convention how mistakes are made

By E. W. Doty, Treasurer
Cleveland District Golf Association

GREENKEEPERS have a very distinct interest in the way the accounts of their clubs are kept.

Mr. Pirie in his story about the stone-cutters seemed to carry the idea that greenkeepers got their reward from a good job well done. You remember Mr. Pirie's story: There were three stone-cutters and each in turn was asked what he was doing. One said that he was cutting stone; the second said he was getting eight dollars a day; and the third said he was building a cathedral.

The point to this story, of course, is that greenkeepers ought to put imagination into their work and so do their job that they can enjoy the beauties of the landscape which they help produce, and the smooth greens which they bring into existence and the shady nooks that they invent and build.

One would be more than foolish to undertake to underestimate the real moral to Mr. Pirie's tale, but after all greenkeepers are just human enough to want something besides the view of the "cathedral." A little of the "eight dollars per day" result is not to be overlooked. The average greenkeeper has a tremendous interest in "eight dollars a day," and a still greater interest in ten dollars a day and twenty dollars a day.

Show me the greenkeeper who is satisfied with the salary he is drawing and I will show you one who is so far toward the top that he can look over the garden wall without a step ladder or I will show you a man who is not worth what he is getting.

GREENKEEPERS are strange people—they are working not only for the joy of being the best greenkeeper in their particular neighborhood but also for the monthly check. And the monthly check figures quite a little in their viewpoint of life.

What does that come around to? Isn't it true that if greenkeepers do the best job in the world and maintain their courses in the most efficient way in the world, and at a cost that is reasonable they are not only entitled to the pay they are getting, but maybe to a little increase next year?

If after doing this, nobody knows it, where does the greenkeeper come in?

How does the fellow who gets eight dollars a day get his raise to ten dollars a day if nobody knows he is worth eight?

How does the greenkeeper expect to get the good-will, which after all is shown finally in an increased salary

if he does a good job and nobody knows it?

Bookkeeping Affects Greenkeeper

WHAT is going on that affects the greenkeeper in this particular? All golf clubs and country clubs are supposed to keep books. Most of them do, because there is quite a penny goes through the till of the ordinary country club, and it is necessary to write a history of those transactions. That is all bookkeeping is, it is simply writing the history of the business transactions for a given period.

What affects the greenkeeper in that history? The bookkeeper of the club takes what the greenkeeper does, not in the form of so many bushels of seed or so many tons of manure, but all finally reduced to dollars and cents. It all comes back to this, how well does the greenkeeper do his work, and how much does it cost?

If the books are kept so that the history of what the greenkeeper does and what somebody else does is mixed up together, as is often the case, the greenkeeper is handicapped because it is impossible for the Green committee or whoever has the say, of knowing what he does in terms that can be understood.

For instance: A tournament is held. Supposing they spend one thousand dollars for special printing and prizes and trophies. Where is that charged? In many books of record it will be charged to the operation of the golf course.

What has the greenkeeper got to do with the trophies of the club?

What business is it of the greenkeeper what is spent for trophies and why should it be mixed up with the history of his efforts?

Perhaps that is an extreme case. Here is one that isn't. In nearly all clubs, there is a caddymaster. The caddymaster's wages are usually charged to the maintenance of the golf course.

What Should Be Charged the Greenkeeper

WHAT rule should we have for the keeping of the accounts that affect the greenkeeper? I hold what should be charged for maintenance is what it costs for service and materials for the purpose of keeping the golf course ready for play according to the rules of golf.

When the cost of ice water and caddy cards and caddy service and professional (by professional now, not that the professional has anything to do with the operating

Table Showing Total Income

	Dues	Initiation fees	Green fees	Asso. fees	Lockers	Misc.
Mayfield.....	\$61,759.37	\$21,500.00	\$4,202.00	\$2,526.20	\$3,609.46	\$3,346.14
Westwood.....	53,243.75	9,100.00	8,884.00	4,785.00	1,795.00	4,140.52
Oakwood.....	57,228.50	400.00	3,346.00	3,950.00	3,645.00	5,647.25
Canterbury.....	44,980.81	4,700.00	6,461.00	3,264.00	3,100.00	5,769.55
Willowick.....	40,829.50	16,337.50	8,324.00	2,520.00	1,865.00	909.44
Chagrin Val.....	41,506.25	3,600.00	7,902.50	1,410.00	1,577.50	2,547.44

of the course itself), and laundry for the towels for the tees, and other services charged to course maintenance, it means that the greenkeeper has a heap of charges to account for that have nothing to do with the upkeep of the course.

In the case of my own club this amounted to \$4400 last year. Adding this to the actual cost of maintenance, and we have a maintenance cost per hole that is about \$250 too high.

If the club bookkeeping department will eliminate from the cost of maintenance all costs except what are defined above, that is for everything except costs for material and labor sufficient to keep the course ready for play during the season, according to the rules of the game it will then be possible to make comparisons with other accounts of other greenkeepers, to the end that the resulting statistics will mean something.

Brother Morley keeps the Youngstown club going at a cost of \$1200 per hole on the basis I am now talking about and it costs my club \$1300. There must be some reason for that. It may be that our course is better kept or more wastefully kept. It may be labor is higher with us than with him, but whatever it is we can make a comparison and get somewhere. However, if it turned out we had mixed in ours a lot of these costs, this four thousand dollars I have been talking about, and he hadn't then you see he is paying more per hole than we are but we don't know how much.

I am not a bookkeeper, nor am I a certified public accountant. In all the clubs I have had anything to do with, I find those that do not have a certified public accountant generally have the easiest accounts to analyze. I am not here to berate a certified public accountant. The only thing I object to as far as golf club accounting is concerned is that they attempt to set up a card of accounts just as they would for a railroad or a manufacturing concern, and that is exactly what doesn't help us out in getting at a determination of costs for the maintenance of the course.

Compare Maintenance Costs Per Hole

ALL other costs in a country club are not to be compared one with the other, but it is fair to compare the maintenance cost per hole of any two or more clubs.

This can not be done if the accounts are run as they usually are run by a large number of the country clubs.

When I first took hold of the work of trying to make the comparisons in the Cleveland district six years ago, it was very difficult to make any comparison. It took a lot of real co-operation to get the accounts so we could make any kind of comparison. As it is now we can make comparisons between six and eight of the best clubs on a hole basis. To say it costs so many thousands to maintain a golf course is too big. When it is found that this club pays \$1,150 per hole per year to maintain its golf course, and another is \$1,200, another is \$1,600, so on, there is a basis that will mean something and the differences found must be accounted for.

It is in the accounting for the differences produced by different greenkeepers that make it possible to get a line on their ability. For that reason there ought to be a rigid rule as to what costs shall go into the history of the greenkeeper's accounts. If only the costs as provided in the rule given herewith, are included, it will be possible to get a sound basis for comparison of the work done.

A greenkeeper who does his work on the basis of this definition, for \$1,000 a hole per year, and does it in a way to meet the approbation of his own committee and the praise of visiting committeemen will not have any trouble in keeping his job probably at an increased salary, especially when other greenkeepers in the same district can't do their job for less than \$1,200 per hole.

Or the comparisons may take the turn that the man who is doing it for \$1,000 per hole is not keeping his course in as good condition as he should while the \$1,200 per hole keeper is far and away ahead of him.

In other words the first man is not a good keeper because his costs are low at the expense of results. He isn't spending money enough; which may be his fault or may be the Green committee's fault. The difference of \$200 per hole in upkeep charges must be accounted for some way. If the greenkeeper is working for something besides "cathedrals" he is interested vitally in an honest history of the results of his labors.

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Table Showing Expense Distribution—Cleveland Clubs

	Course Main	Green Service	Club House Expense	Grounds and Administration	Taxes	Ins.	Interest or Land Rental	Entertainment	Restaurant Loss	Depreciation	Misc.	Tennis
Mayfield.....	\$23,290.42	\$552.13	\$25,283.63	\$4,845.05	\$3,603.96	\$10,737.68	\$2,216.94		\$6,877.47	\$11,483.70	\$4,204.70	\$1,641.47
Westwood.....	24,246.25	4,440.59	21,902.75	2,897.94	3,489.26	6,026.71	2,707.19	\$9,357.07	\$459.41	6,969.42	12,374.84	2,297.62
Oakwood.....	19,304.29	6,730.44	22,625.87		5,321.24	10,344.40	4,583.65		2,798.84	2,719.71		6,325.22
Canterbury.....	26,766.06	308.21	11,802.05		2,716.14	4,380.97	777.89	9,125.51		7,398.25	6,656.11	
Willowick.....	24,777.28	1,897.73	16,863.02	1,271.40	1,419.94	4,200.00	1,883.49	5,486.88	1,535.81	6,409.29	7,020.00	376.20
Chagrin Val.....	19,717.27	2,893.67	6,402.25	1,664.41	4,043.71	3,844.70	1,883.37	11,359.33		3,708.70	8,289.33	707.58