Economy on the Golf Course

By JOHN QUAILL, Superintendent, Highland Country Club, Pittsburgh, Pa.

Read at the 6th Annual Educational Conference of the National Association of Greenkeepers of America, held at New York City, January 19-22.

In these dark ages of business depression when everyone is yelling economy and cutting budgets here and there with the one thought in view of saving money, it is the greenkeeper's hard luck to be the goat in a lot of the budget cutting. The Board of Directors and Finance committee of the average country club are holding night sessions trying to figure a way out of the financial difficulties which practically all of the clubs of the country are faced with today. The usual outcome of these meetings is the order to cut down expenses and cut them deep.

The one thought is to save money this year. Did the Board of Directors and the Finance committee look ahead a few years to see what the outcome of this economy program was going to be? Did they consult the greenkeeper and ask, if there were no fertilizers put on the fairways for a couple of years what would become of the beautiful turf that the greenkeepers worked long and hard to get? Did they figure that the cost of repairs and the loss of time keeping the old equipment going would be more costly than some new equipment; something more efficient and more economical to operate? In ninety-nine out of a hundred cases they didn't.

NO TWO COURSES ARE ALIKE

Some courses can be more economically maintained than others. No two courses in the same district can use the same methods. No two courses get exactly the same results from the same brand of fertilizer. In each case, there is a particular problem which must be met at each course. The demands of the membership, the wealth of the club, the attitude of the officers and directors and last but not least, the knowledge and experience of the greenkeepers are vital factors.

Some greenkeepers are born executives, some are experts in the mechanical line, some are experts in



JOHN QUAILL

One of the younger greenkeepers who has made a remarkable reputation at one of the most prominent courses in the Pittsburgh district. As the saying goes, "he knows his stuff." fertilizers and others lean toward the architectural side and construction. The greenkeeper who can sit down and figure out his own problems and the best methods of working his men and the best fertilizers to use is the man who has nothing to fear in this time of budget cutting. He will find a way out and will not have to suffer in the next few years from the economy he was forced to practice this year.

True economy can be traced back to the construction days of the course. Did the contractor look ahead to the problems that the greenkeeper would have to face? Did the architect lay out the

course with the view of economical upkeep? The chances are that they didn't. Their idea was to build a golf course and make their money out of it and the club could worry about the other stuff.

TOPOGRAPHY AFFECTS UPKEEP COSTS

THE topography of a course has a lot to do with the upkeep costs. A flat or level course can be maintained far more cheaply than the hilly course. The rolling or undulating type of course offers few problems. But, if they were poorly constructed, they can run up the costs very fast.

When the greens were built, were they great big greens of fifteen or twenty thousand square feet? Where is there any economy in having a green that big? The cost of mowing is greater, the cost of fertilizer is greater, the cost of topdressing is greater and think of it when Brown Patch hits the big green! The cost of fungicides will amaze you to say nothing of the amount of worry you have.

The only advantage of a big green is that you have more playing surface. And very often these big greens are used up in useless rolls and undulations for, without these, the green would look like a baseball diamond. It would have been better to have a green of six or eight thousand feet or smaller

and be able to keep it right and keep it more economically.

If they had to make something large it should have been the tees. Too often the tees are cut down to a thousand square feet when they should have five thousand square feet in them. This is one of the best places to economize that there is on a golf course. In the first place, you can move the markers often and always have a good teeing place. It will give the used part a good chance to heal. On a level course where there is not a steep terrace, the tees can be cut with the fairway mower. At any rate, the power mower can be used to good advantage.

With economy in view, a golf course can be constructed that will be a greenkeeper's paradise. Medium-sized greens, large tees, large traps and if there is any need for terraces, they should be pulled out into long gradual slopes so they can be cut by power mowers.

HILLY COURSE COSTS MORE TO MAINTAIN

O_N A hilly course, problems of economic upkeep are so many that you could keep talking all day on the subject. Usually, the tees and greens have to be built way up and this means terraces. If you haven't the money and material this means steep, sharp slopes. This in turn means they have to be cut by hand with a scythe and that form of labor is costly. Keep the terraces long and gentle and the old power mower can do the work. Irrigation, drainage, and fertilization all present big problems on the course with many hills.

Some people say that a large trap is an expense. All traps are an expense as far as that goes, but a large trap is more economical to keep up. There are less banks and terraces and less work in trimming. If they are properly constructed, the amount of labor required will be negligent compared to keeping three little ones. It may seem like it takes a lot of sand to fill them up but there is less wastage.

Good equipment is the best insurance against high upkeep costs. A piece of equipment that is in the shop about one day out of five for repairs is a drain on the treasury. You not only lose the services of the machine but you lose the time of the men repairing it and the cost of repair parts. Buy good, reliable equipment and have a good mechanic take care of it and you will have satisfaction. With

the new type mowers on the market today cutting a swath up to twenty-six feet wide, you can almost forget your fairway mowing.

GREENKEEPER SHOULD CHOOSE HIS EQUIPMENT CAREFULLY

THE greenkeeper should pick out the type tractor and mowers best fitted for his particular needs and standardize on that type. If you have three or four different makes of mowers and one of them goes bad, you have a job for a couple of mechanics and a machinist to make them hook up with the ones you are using.

Probably every greenkeeper has his own ideas when it comes to tractors and mowers, but a fellow can hardly go wrong these days with the fine equipment on the market. Some prefer a push type tractor and some prefer the pull type. Each has its own advantages and drawbacks. The push type offers a clear view of the mowers and where you are going and does not lay the grass down before it is cut. It is easy on the operator as he does not have to turn around continually to watch his mowers and a lot of other conveniences which are not found on the pull type.

On the other hand, the pull type is more flexible and can be used for a number of other purposes by simply unhooking the mowers which takes some time with the push type. The general trend today is towards the pull type. The average course can be cut in from eight to fourteen hours with the modern tractors and when using the extra wide mowers this time can be cut by a couple of hours. Saved time means saved money so here is one place to start economizing.

POWER MOWERS FOR GREENS HAVE DRAWBACKS

Power mowers for the greens have their good and bad points. Anyone who likes the power putting-green mower can save time by using them. When I say this, I means the triple mower. The single mower does not save all the time claimed for it and there is not much difference between that and the hand mower. On the hilly course, transportation of a power mower means a lot. Taking my course as an example, which is sure hilly enough as any one who has been over it will verify, the triple mower would not save so much time as we would lose all the time gained by faster cutting in getting from green to green. We would have to double back quite a distance to get around. As time

is what we are trying to save, it is not the last word for us.

Power mowers can well earn their upkeep other places though. Tees and approaches can be cut very quickly and in good shape with the thirty-inch power mower. One man on my course last season cut all the tees and approaches in a day and sometimes had enough time left to cut the lawns around the clubhouse. Before we got the power mower, three men were doing the same job. Where the terraces are long and gradual around the tees, greens and traps, the power mower holds its own. A man with a power mower can take care of all these in very little time and make a better job than by hand with a scythe.

Modern equipment for topdressing and spreading fertilizer is a great money saver. It is nothing to topdress eighteen greens a day with the topdressing distributor. Fertilizer can be applied in a short time and be applied more evenly. For fairway fertilizing, the lime spreader can be adapted to most any type fertilizer used. Last spring when I applied fertilizer, we used the lime spreader which we altered a bit. We covered fifteen fairways in one day with two men hauling and two spreading. The ground thawed that night and it was too soft to use the spreader the next day so, as we only had one more fairway to fertilize, we decided to do it by hand. Ten men lined up with buckets to do the job and it took the ten men one hour and a half to fertilize that one fairway. If the lime spreader didn't save money and time then I don't know what I'm talking about.

PRICES DOWN AND BUNK IS OUT

Now that we have discussed the equipment and construction end we will get into the purchasing end of the question. It is gratifying to know that prices are on the downward trend and that will help out a lot. A few years ago, the golf course was the easy mark for the seed and fertilizer salesman but through the Green sections, the service bureaus and the Greenkeepers' associations, that has all been changed. A few years ago, if a salesman came around we had to take his word for a lot of bunk about organics and inorganics, soluble and insolubles and a lot of other things that the average greenkeeper did not fully understand. All he knew was that he wanted an organic base in his fertilizer



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and the salesman could sell him most anything with that base.

But since the greenkeeper has become better educated through the annual conferences and short courses conducted by the colleges he knows more than the average salesman about his fertilizers. Fancy names, and fancy claims go hand in hand with fancy prices. Do not be misled by great, big important looking analyses on the bags. Most times they don't mean a thing. I once saw a bag of fertilizer with a fancy name like Greely Great Grass Grower for Golf Greens with an analysis like this.

Nitrogen	4.2 per cent
Equivalent to Ammonia	5.0 per cent
Phosphoric Acid (Soluble)	6.0 per cent
Phosphoric Acid (Reverted)	2.0 per cent
Available Phosphoric Acid	8.0 per cent
Insoluble Phosphoric Acid	1.0 per cent
Total Phosphoric Acid	9.0 per cent
Potash (Water Soluble)	5.0 per cent
Equivalent to Sulphate of Potash	9.4 per cent

What was really meant by this analysis was that it was just another 5-8-5 fertilizer and priced at eighty dollars a ton it was far from cheap. Most fertilizers have been overpriced considering that a large percentage of them are made up from waste or by-products. Why pay \$75.00 a ton for an 8-5-2 fertilizer which means you are paying \$5.00 per unit for plant food when you can buy forty units of plant food for \$80.00 a ton or \$2.00 per unit, a net saving of \$3.00 per unit.

A ton of sulphate of ammonia and a ton of 20% super phosphate costs about \$60.00. You are getting forty units of plant food at the cost of \$1.50 per unit. If you prefer an organic base fertilizer, you can buy a complete fertilizer today that sells for about \$30.00 per ton with an analysis in itself of about 8-4-2 or at about \$2.00 per unit. By using this as a base and building it up with sulphate of ammonia and super phosphate you can have a fertilizer that will give results for a cost of about \$2.00 to \$2.25 per unit. Think this over before buying your fertilizer and see how much you can save.

GOOD GRASS SEED IS INSURANCE

Grass seed is another item which can run up costs very fast. Cheap grass seed is cheap grass seed and nothing else. Good seed is good seed and a lot more. It is insurance that it will grow and produce a good turf. Why buy seed with a germination percentage

of 60% for \$30.00 per hundred pounds when you can buy at 80% seed for \$35.00 per hundred and get better results. Buy your seed on the basis of a guaranteed analysis and from a reputable seed house and you will have the satisfaction of knowing you are getting seed true to name and of the best quality.

In every country club there are members who sell things you need on the golf course. These men are always after the business and too often want to make their profits from the club pay their club expenses. Some even go so far as to quit the club because they do not get the club's business. Buy where you get the best quality and price regardless of who the members are. You will be sure to have the majority behind you and they will uphold you if you are right.

I know of a certain case where the club was putting in a watering system and they were in the market for quite a lot of pipe and fittings. About ten members of that club sold pipe and all ten wanted the order and threatened to resign if they didn't get it. The club finally split up the order into about ten parts and about ten different kinds of pipe were used on the job. When it came time for delivery, every one delivered at a different time and some only part delivery. The job was continually tied up for lack of some needed item which had not been delivered. It almost took an expert accountant to figure out who had the order for the needed items and then it was a case of calling and begging for delivery.

The following year, the lines were extended and this time, the club advertised for bids on materials. The lowest bidder meeting the specifications got the order and the funny part about it was that no one quit the club. Everything went along red and rosy and the job was finished up in good time because material was there when needed and if it wasn't, you knew who to blame.

The wide-awake greenkeeper will hunt out his best sources of supply and stick to them as long as they treat him right and give good quality and service at the right price. Oftentimes, when two or more clubs are located close together, considerable money can be saved by co-operative buying or the pooling of orders for supplies. The price on fertilizer is cheaper per ton by carload lots than by less than carload lots. By getting their heads together, they can figure out some good substantial savings.

WHEN CLUBS ADOPT ECONOMY PROGRAM

When a club adopts an economy program it usually starts with labor reductions and wage reductions. This is all right if they are willing to concede a few points relative to upkeep and appearances. When you are forced to work with a short crew something has to suffer. Your course loses that well-groomed appearance. Little things that make a good course have to be dropped. The first thing you know, some one is kicking because the ball washers aren't filled or the towels are not clean or the patch of weeds way off to one side look like thunder and a hundred other kicks.

It's the little things like ball marks on a green or divot holes in fairways that get the players' goats. After driving straight down the fairway for two hundred and fifty yards to have your ball end up in a divot hole or the ball on the green comes to rest in a ball mark is enough to make any golfer kick and damn the course. Cutting down your force cuts out all these little items that help to make the game what it is today. If we leave the the big items like regular fairway or green mowing go, the kicks are just as bad and a kicking membership means a dissatisfied membership and it won't be long till they will be yelling for your scalp.

If wages are reduced, the help kicks and they do not put their hearts into the work and again the course suffers. If a man is dissatisfied, he will not make a good man to have around. He will poison the other men in contact with him and the poor greenkeeper then has his hands full.

With dissatisfied help, the greenkeeper becomes dissatisfied and will probably end up by throwing up his job. He has to work hard to get the most out of his crew and has no time to relax and plan out a program for the best upkeep of his course. If you have to cut down your crew, see that you get enough good equipment to be able to do the usual work with less labor. If a machine will replace two men, alright, but don't buy a machine to replace one man for you are not gaining a thing because it takes a man to operate the machine.

PAY A FAIR WAGE FOR A FAIR DAY'S WORK

Pay a man a fair wage and insist on a fair day's work in return. If a laborer will not give you a fair day's work he has no place in your crew and will spoil the other men. Vary your men's work so they will get a chance to do a little of everything.



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A fellow gets tired of sitting on a tractor all day cutting fairways. Give him a chance once in awhile and he will appreciate it. The same applies to the men who cut the greens. After pushing a mower for a few hours he will be glad to do something else. This is one of the best ways to keep the men satisfied.

Another good idea is to get your men interested in the game. If a fellow plays a little he will appreciate a good green and all other departments of the course. He will see how necessary it is to have a true surface on a green or a good lie on the fairway. After he gets into a few deep footprints in a sand trap he will see that they are raked properly and regularly. A man interested in his work is usually a success and this applies to the ordinary laborer as well as to the scientist.

The greenkeeper has enough to do without undertaking a lot of work that his men should be doing. Some greenkeepers pitch right in and mow greens and drive tractors and do about as much work as two or three of his men. While he is working so hard, his men are probably sitting under some tree or at the barns waiting for orders. The greenkeeper has enough to do when he properly oversees the work. He should have time to plan his work weeks ahead and think out new ideas. He should have time to experiment along scientific lines with the thought in view of more economical and efficient maintenance.

My chairman once told me that when I pulled a weed from a green I was doing some other man's work and that I was getting paid to see that he did it. When the greenkeeper is working hard it is very likely that a couple of his men are standing around watching him work and wondering how long he is going to last.

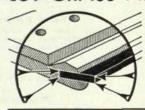
Practically every club in the country is retrenching at this time and thinking out the financial problems which are confronting them. So now is the time for the greenkeeper to get his words in and explain where he thinks it best to start the economy program. Tell your chairman what you think and show him that you are not sitting back and letting them work out your problems. Tell him your ideas and I'll bet a good hat that they will approve a bunch of them and give you credit for being wide awake and on the job.

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Golf Course Economy

(Concluded from page 18)

Attend all the meetings you possibly can and if you are able to attend a short course at one of the agricultural colleges it will surely pay you. If you are going to be a greenkeeper, be a good one and it

When you economize, be sure it is true economy and not false. Will the dollar you save this year have to be spent along with some extra ones next year in order to correct this year's mistakes. Look before you leap and when you do leap be sure to jump far enough to make it worth while.

Philadelphia News

(Concluded from page 31)

interest in the activities of the National. The hope was expressed that they are.

After a wide open winter this district is now having a taste of real winter, snow, temperature, and wind. It is rather trying as many of us were on the verge of starting various seasonal activities. However, it will not be long now before the mowers are out.

The Buel Perforator

J. F. Buel, Prospect Street, Woburn, Mass., has placed upon the market a perforator of the spike roller type, which he claims overcomes the drawbacks of hand and ordinary roller methods and assures perfect spiking for seeding, fertilizing and watering. It is simple to handle requiring only two men to operate it and is equipped with two auxiliary wheels which make turning and transportation easy. A descriptive circular will be sent upon request.

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