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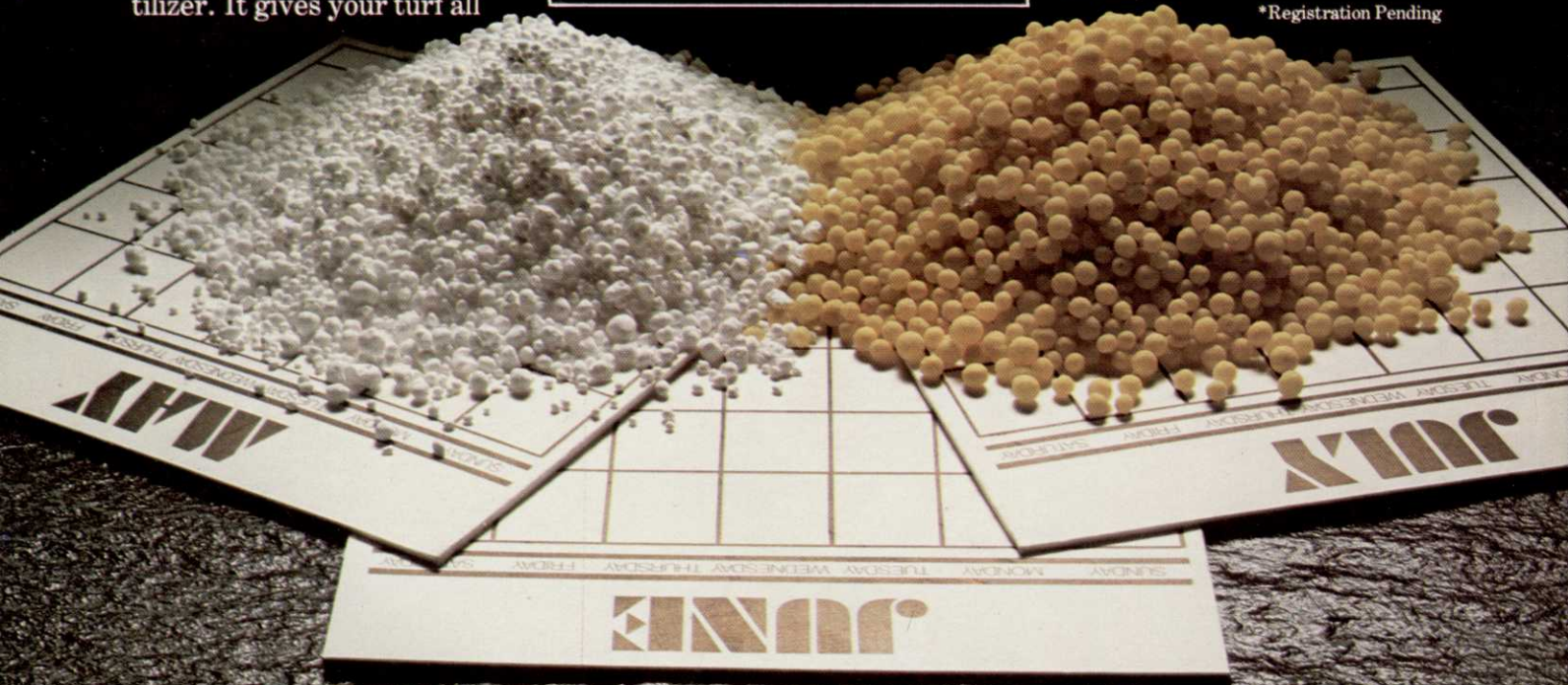
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## President's Message



What do we do when the well runs dry? What do we do when Mother Nature says she will not cooperate — she will not provide what we need in the quantity and quality we assume is unending?

Perhaps I am being over pessimistic, but I do not see how we can continue to demand the ultimate “wall to wall” perfection when we are so dependent on basic commodities over which we have no control.

Understand the “we” refers to the golf industry — architects, developers, builders, installers, educators, researchers, equipment and supply manufacturers and marketers, golfers of all abilities, and — of course — we, the superintendents, who ultimately are placed in the position of “guardian angel” of man’s evolution in golfing desires and nature’s reluctance to succumb to these desires.

Please do not misinterpret my thoughts. I am not condemning the occupation I enjoy and which provides my livelihood, but I do wish to point out that we can no longer be insensitive to the scarcity of vital and politically volatile ingredients which are an absolute basic necessity for survival. The recent water shortage is presently foremost in prominence and is an excellent case in point. It is possible to literally have the well run dry.

It is conceivable to design, build, supply, and maintain a challenging and enjoyable golf course and at the same time conserve energy and use of politically potent life sustaining elements. Golf courses of relatively shorter yardage, smaller greens, more limited manicured green area, and more rough area in natural growth with no supplemental cultivation produce a happy medium between our present expansive park like atmosphere and a more positive test of exacting golf. The benefits of open green areas to society are immeasurable, but requirements for existence cannot exceed the availability of sustenance.

I would like to see and, humbly predict that, the golf courses of the “1990’s” will be more discerning of nature and as such, by design and cultural maintenance practices, will place more golfing emphasis on skill. Bureaucratic regulations and environmental restraints will dictate further conservation reformation. Let’s be prepared to graciously accept the inevitable and, at the same time, vigorously oppose the ridiculous, selfish intent.

We certainly cannot be defeated by nature’s eccentricities or by over zealous preservationists, but the well must not be permitted to run dry — we all have too much at stake.

*Bill Wagner*

# The Florida Green

The Official Bulletin of the Florida Golf Course Superintendents Association  
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### TABLE OF CONTENTS

President's Message . . . . .	3
Editorial . . . . .	5
Research + Dollars = Solution . . . . .	6
The Evolution of an Equipment Repair Parts Inventory . . . . .	9
The Gator Growls . . . . .	13
Crowfoot Open . . . . .	15
Nematode Control Update . . . . .	16
Early Extinction By Excessive Inflation . . . . .	18
Florida Pesticide Use Survey . . . . .	18
Man Destroys Fleas, House . . . . .	19
The Golfing Superintendents . . . . .	19
South Florida Sunshine . . . . .	20
Agronomy Quiz . . . . .	23
Everglades Hosts Poa Annua Classic . . . . .	24
18 Ways of Mis-Using Equipment . . . . .	27
Hurricane Preparedness . . . . .	28
DeBra Announces Greens King IV \$100 Rebate Program . . . . .	31
Palm Beach Trade Winds . . . . .	33
Club Management . . . . .	34
Magazine Distribution Policy . . . . .	34
Treasure Coast "Tide"ings . . . . .	35
North Florida Divots . . . . .	36

### ABOUT OUR COVER

18th Green at Bay Hill Golf Club in Orlando. See article on Page 15. Cover Photo by Dan Zelazek.

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# Editorial

Turfgrass in Florida is a billion dollar plus industry. The University of Florida has been appointed guardian of this industry to help us prosper through research and extension.

For the past two years The Florida Turfgrass Association has applied considerable pressure on the turfgrass research and extension program at The University of Florida. As of this writing the fruits of this labor are not evident.

There appears to be a definite lack of commitment from the university towards turf. Three cases in point are:

1. Appointment of a *part time* turf research coordinator for this billion dollar industry.
2. The closed mind attitude of some administrators and research people.
3. The dearth of extension publications from the university for the past four years. How can research get into the hands of industry without an effective extension program?

"*The Florida Turf*", published by The Florida Turfgrass Association is supposed to be a vehicle for getting research information from the university to the industry. Over the past year the editor of "Florida Turf" has literally begged the university personnel for papers to print. During the past month three very good research papers from university personnel have appeared in turf magazines outside the state of Florida. Is this proper support of our Florida turf industry?

It looks like the FTGA will have its first \$100,000 plus year collecting funds for research. The figure could reach a quarter million. That will buy a lot of research. A lot of pressure has been applied by industry on the FTGA Board of Directors, even suggesting the funding of research outside the state of Florida.

We cannot allow this to become an alternative. We must dedicate our efforts to helping to correct what we all agree is a poor situation.

# RESEARCH + DOLLARS = SOLUTION

By CHIP POWELL  
The Deerwood Club

During the past years, there have been several problems that have come up over and over again. I cannot count the number times I've heard superintendents lament about the problems of government regulation, energy, price and availability of fertilizers and pesticides and — more recently — the water shortage.

While there are no easy solutions to these difficult problems, I believe it is important for us all to realize there are some very constructive things we can do about them.

On the matter of government regulation, we need only look at how other industries are working with the problem to see what must be done. Other industries hire a lobbyist and put him to work watching the legislature to protect their interests.

At the recent F.T.G.A. board meeting in Orlando, this subject came up. The board has been investigating this matter and has discovered we could contract the services of a lobbyist, who is currently working with some other agriculturally concerned industries, for no more than \$10,000 per year.

It seems the only obstacle between us and this vital service is the money. It does not take much to figure out that this sum represents only about \$15 per year from each golf course in Florida. It is difficult for me to accept the idea that our industry cannot easily come up with this sum of money.

In regard to our dilemma with the increasing scarcity of water, fertilizers, pesticides and fuels, we also have a clearcut method of working on these problems. The method is called research.

One of the major problems we face with research is cost. Individual golf clubs cannot afford to equip and staff their own research and development departments. The only other option is for each club to come up with an affordable contribution to be joined with contributions from other concerns in the turf industry. The funds would then be directed into the hands of institutions that are set up to do research.

The Scholarship and Research Foundation of F.T.G.A. is the perfect organization to handle this. It is already organized, staffed and has non-profit status so all contribu-

tions are tax deductible. In addition, the staff is entirely volunteer and the foundation's small administrative cost is handled by the general fund of F.T.G.A. This means 100 per cent of every dollar donated goes directly to fund scholarship and research.

It is vital the club industry realize what a well-funded scholarship and research program offers. It is important to understand scholarship and research complement each other. One cannot exist without the other, as we will try to show in the following paragraphs.

Money directed towards scholarships accomplishes many things. First, if it is awarded to a graduate student, the student will do research for his graduate thesis. Hence, money spent in this way will not only yield some immediate research findings, but will also help train a researcher of tomorrow. Money awarded to undergraduate students will promote the training of the superintendents of tomorrow. This is extremely important because it is these trained professionals who will put the research findings to work in the field and help the industry realize the fruits of the money used to fund research.

I would like to point out that clubs are not capable of training a superintendent on location. They must rely on colleges and universities for that training. After employment the superintendent can keep up to date by taking advantage of continuing education made available by F.T.G.A., G.C.S.A.A. and local superintendents chapters. This is necessary but the fact remains that clubs must rely on colleges and universities for the initial training.

It must also be pointed out how desperately we need research. Consider these problems: mole crickets, contaminated grasses in putting greens, reduced pesticide availability, energy related problems, double digit inflation — and throw in the water shortage. Research findings in these areas could not only save the industry many dollars, but could mean the survival of golf turf as we know it today. I am not trying to be a prophet of doom; I am just trying to recognize our need to act and act soon.

In the case with scholarship and research, as with the lobbyist, money is our obstacle. However, in this area our need for money is much more substantial and much more difficult to attach a specific figure to. It is for this reason

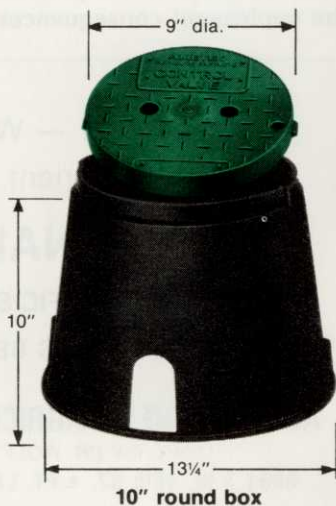
*(Continued on Page 8)*

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## RESEARCH + DOLLARS *(Continued from Page 6)*

F.T.G.A. and the Florida G.C.S.A. have agreed we should begin collecting \$500 per year from each 18 holes of golf in the state. One hundred courses would provide \$50,000, 200 courses \$100,000 and so on. There is no question the amount of funds needed to initiate the type of program we need is in the hundreds of thousands of dollars per year. You need only look at your own budget to see what \$100,000 buys to appreciate how much money is needed.

This program has been promoted during the past months and is becoming very widely accepted. I have no official count of contributors yet, but several checks have already been received and numerous courses are committed to donate the funds between now and October when F.T.G.A. holds its conference and show.

Each superintendent in the state must get tuned into this idea and take responsibility for selling it to his club just as he would any other vital item in the budget. If funds are not in the present budget, they can be raised in many ways such as raffles and special tournaments held at the club. The presidents of the local superintendents chapters will be able to help in coming up with ideas on how to raise money or how to present it to the board of directors or whoever else must approve the expense at the club.

In about a month, F.T.G.A. will make available a brochure explaining the work of the Scholarship and Research Foundation. Later this year a slide set will be available for use with more detailed presentations. Local chapter presidents will be kept up to date on the progress of the brochure and slides, and it is to them that each superintendent should look for information and answers to questions.

I sincerely hope each of you will give these things serious thought. We should not let a minor amount of money stand between us and the vital services of a professional lobbyist, nor between us and a well-funded scholarship and research program.

Over the years there has been much criticism of how little our professional associations like F.T.G.A. do for us. If we truly want F.T.G.A. to do the things for us we so badly need, we must be committed enough to provide F.T.G.A. with the necessary funds. If we overlook the opportunity to do something about these annoying and costly problems now, we will have only ourselves to blame in the future for the unpleasant consequences of our inactivity. ■

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# The Evolution of an Equipment Repair Parts Inventory System

By S.F. UDELL  
Co-Chairman, Greens Committee  
The Woodlands Country Club

"Your budgetary request for Equipment Repair Parts of \$55,068 is too high." This, I was told by the Finance Committee Chairman of our two golf course complex in September of 1978.

We usually arrive at the final budget figure for the complex by adding an approximate allowance for rising costs and contingencies to the actual amount spent the previous year. The \$55,068 figure did seem inordinately high, particularly when compared with actual expenditures of \$26,958 in 1974-75, \$29,554 in 1975-76 and \$34,907 in 1976-77. The request for 1978-79 represented a 36% increase over projected 1977-78 expenditures. We therefore felt we should make do with a figure that excluded rising costs and contingencies.

At about this time, Dr. Max Brown submitted a report to our Board of Governors based on a three-month study of our entire greens operations. He stated our actual expenditures could be broken down into four categories: payroll and payroll taxes 61%, fertilizer and herbicides 12%, electricity and fuel 8% and equipment repair parts 11%. According to Dr. Brown, "the mean average for Equipment Repair Parts for golf courses in southeast Florida is 7.1%." He considered expenditures in the first three categories either uncontrollable or at an irreducible minimum.

Since I agreed with the Finance Committee Chairman, and knowing our expenditures were way out of line compared to the statistics provided by Dr. Brown., I was determined somehow, some way, these costs would be cut. For want of a better yardstick, I took Dr. Brown's mean average figure of 7.1% and arrived at a new total of \$38,000. The revised budget was resubmitted, accepted and approved.

It was apparant drastic control measures had to be instituted to meet this budget. The department consisted of a head mechanic, three full time mechanics and one part time mechanic — and no one was keeping any records.

The first step was obvious: daily job records had to be kept. A supply of three-part snapout forms modeled on those used by service stations was ordered. The forms provided space for listing parts, their cost and labor cost.

It was the head mechanic's responsibility to keep the records, noting the description of the job, the date and the

name of the mechanic who performed the work. The number of hours worked was also noted at an hourly rate arrived at by adding a percentage for payroll taxes, unemployment insurance, etc. to an average hourly cost (salary) of the entire work force.

The original copies were kept in numerical order in a binder, the duplicates were placed in individual manila folders assigned to specific machines. The head mechanic kept the third copies as a record of preventative maintenance, parts used and for whatever need future experience would dictate.

The system was started on October 1, 1978 and worked out very well right from the beginning. The time required for record keeping was negligible and easily absorbed as we were averaging only six jobs a day. After three full months, it became clear we were garnering a wealth of feedback information. According to our Accounting Department, purchases for the period totaled \$12,119; however, the total cost of parts used as taken from the job tickets was \$7,531. Why the discrepancy of \$4,588? The most logical assumption was the dollar value of our inventory had increased by that amount, but *without records* this had to be merely an assumption!

Armed with these figures, we arranged a meeting with the head mechanic and the greens superintendent. It was agreed to establish an inventory control system immediately. The first step was the taking of a physical inventory on a crash program basis. Under the direction of the head mechanic a team of three girls was organized. They were drafted from the maintenance crew, selected on the basis of their educational background, innate intelligence, etc. They worked during slack periods, after hours, and full time on rainy days. The work was completed on January 12.

The procedure was quite simple. The part number, description, and the number of units were annotated on lined 8½ × 14 sheets. Parts were categorized as either related to specific equipment or interchangeable. For example, all parts used to repair Greensking mowers were listed under the heading "Greensking". Parts used interchangeably were listed under separate headings such as "bearings", "fanbelts," and "sparkplugs". The completed sheets were given to the head mechanic who added the unit cost, multiplied this figure by the number of units and entered the total in the last column on the right hand side of each

(Continued on Page 10)



## INVENTORY *(Continued from Page 9)*

sheet. At the bottom of each sheet a total for this column was annotated. By adding up the bottom line figures from the 55 inventory sheets, we arrived at a dollar value of the inventory — \$30,000.

We found that our inventory consisted of 2,100 different categories of parts with a total of 5,000 units.

Once the initial inventory was completed a method to keep it up to date had to be devised. Many suggestions were advanced by the superintendent and members of the Greens Committee. We seriously considered computerizing the initial inventory through a rental service. Then daily information on parts used could be taken from the job tickets and fed to the computer. The same could be done for parts added to the inventory by using delivery receipts of incoming shipments. We felt this method was not quite tailored to our needs, but that the same principles could be employed and handled by our own people.

The first step was to index every item on all 55 sheets. We used a technique similar to the Dewey Decimal System used by public libraries. For example, the first 26 items were indexed from A1 to Z1, the next 26 items from AA1 to ZZ1, and so forth. Our last entry was NNN30, the 2,107th item. This method was chosen because a straight numerical system could possibly cause errors due to conflict with parts numbers.

The next step was to design an inventory card — one to be used for each part category. We were able to include all the desired information on an 8 × 5 index card. The card illustrated below shows a typical entry. The cards were filed in a



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double metal file, two drawers side by side and placed on a desk in the general office of the equipment shed. To make it easier to find a particular card, we placed colored pressboard dividers between each alphabetical grouping. The dividers had elevated tabs and were stepped from left to right. They can be purchased at any business stationery supply house.

The problem now was to transfer the parts listings from the 55 sheets to the new "inventory" cards. With the cooperation of Club Manager Sam Grayson, a team of three clerks was enlisted from the Accounting Department. They were furnished with a copy of the inventory sheets from which they transcribed the needed starting information, namely the index number, part number and description, equipment for which used, the date (January 12), the number of units on hand, the unit cost and the total dollar amount. The job was done in less than three days.

The new system was now ready to go. At approximately the same time, we were fortunate in securing the services of Kenneth Nicholson as our new greens superintendent. We outlined the new inventory control system to him seeking his reaction, comments and suggestions. His response was most enthusiastic. He welcomed it without reservation, but suggested that it be kept on a daily basis. This would make it a true perpetual inventory and make it a simple matter to prepare an end-of-the-month inventory figure for the Finance Committee.

The starting date for the new system was February 1, concurrent with the beginning of Mr. Nicholson's tenure. The daily work tickets and delivery receipts for the period from January 12 to February 1 were entered on the inventory cards within an hour or two.

How is this system working? At the end of each work day, our head mechanic, Cesar Condemarin, delivers all the completed job tickets and all the day's delivery receipts to the office. Using a copy of the January 12 written inventory, he adds the appropriate index number beside each part entry on the job tickets and delivery receipts. As a result, it takes our part time secretary no more than 15 minutes a day to pull the necessary cards from the file, make the entries and refile the cards. On the last work day of each month, it takes only minutes to compute the dollar value of the inventory and submit it to the Accounting Department. They in turn provide us with an Operations Statement which shows the cost of "equipment repair parts" for the month adjusted for an increase or decrease in the final inventory total. This figure is then carefully checked against the total parts utilization for the month, taken from the daily work tickets.

By June 30, five months of operation had elapsed with no significant discrepancies. The figures for inventory (dollar value), parts utilization and purchases were all in balance. The bottom line figure was \$11,469. This was an average of \$2,294 per month compared to our initial budget request which averaged \$4,589 per month. *The tremendous drop was dramatic indeed. We have been at 5.4% of total budget as opposed to our original projection of 7.1% and actual previous expenditures of 11%. ■*