ules, it gives me weekly and monthly schedules for advance planning.

Its biggest advantage is that it gives me the ability to easily reschedule for rain-outs, emergencies and no-shows, and to maximize the use of the labor force. The system has been in use for over a year now. It took a few weeks of practice for me to become at ease with the system. My kids know more about computers than I do — or care to, but it's no problem to print out daily schedules or adjust budgets for wage rate changes.

A few other bonuses: We have a system that the accounting department understands and doesn't argue with. Also if management or the membership wants to add a few more traps per hole, we can accurately tell them how much costs will increase. Conversely, if they ask us to cut our budget 5% or 10% we have the ability to quickly determine how best to do it and estimate the trade-offs. And nobody can dispute our figures. Communication is much easier now.



Steve McGinnis says printing daily schedules with a computer gives organization to a maintenance crew.

As they say in the computer industry, how did we ever live without it.

What's next? The consultant has just completed a computerized preventive maintenance program for our equipment which we are installing right now. We have high expectations for it.



A plant out of place Would a weed known by any other name be just as unwanted?

Note: This article without by-line came in the mail but I don't know who wrote it. Nevertheless, it's worth reading. — Editor

I fyou look up the official definition of the word "weed" in *Webster's Dictionary*, you would find it defines this term as "a plant out of place." This is to say that the multi-flowering rose bush which occupies space in the Azalea bed is a weed. For it seems that all of the plants we have on God's green earth have some redeeming value when used in their proper context and environment. I guess it just seems that we have an abundance of weeds in our golf course environment.

From goosegrass to broadleafs each year, we in the golf business spend vast sums of time and money to make our golf courses weed free. It is likened to a spring ritual we all embark on; our mission is to create the one ecological environment nature does not allow: a generic segregated monostand of turf, one species above all others. It is at best a quest for turf perfection for the pleasure of our members who have neither the golfing skills nor disposition to fully appreciate and understand.

It is particularly difficult in a subtropical climate like our state as we have hundreds of different weed species which germinate 12 months per year. The best weed-prevention program is, of course, a healthy, dense turf. Yet when we perform our cultural practices, our strong, dense turf is opened up like a stuck pig and the invasion is on. This requires good planning as managers to focus on preventive controls and attention to those species which are most likely to germinate during this time period. Thank God for broad spectrum pre-emergent herbicides.

At my golf course, we focus most of our weed-control money and energy to these special times during the year when our most troublesome species are likely to begin their life cycles. However this is just the starting point in our weed-control program, a constant vigilance for resurfacing plants is an ongoing concern. This program is a combination of efforts and represents a true Integrated Pest Management program.

Our program consists of four main objectives:

- A. Timely pre-emerge application
- B. Post-treatment of young plants
- C. Mechanical removal of large plants with seed stalks.
- D. Fulfilling nutritional requirements of the turf

For any program to be successful, it must be performed at all levels. To perform just one of the tasks will lend the program to failure.

I have found this IPM program will work for all types of weeds found on the golf course. It appeals to me because it is a yearlong program which yields results. I have been able to reduce through the years the amount of pre-emergent material used because of the success of the other parts of the program. Since the pre-emergent materials are the costliest of herbicides, I have been able to reduce the funds allocated for this part of my chemical budget.

This is not to say that we don't spend a good deal of money on weed control. As a general rule, post-treatment programs are not as expensive as pre-treatment. This is due not from the cost of the chemicals but because of the amount of area treated. By reducing the amount treated, you will lower the cost. Depending on the amount of weeds to be treated, it will still adversely affect your chemical budget and require a good deal of manpower to apply them, thereby impacting your payroll budget.

There is also a consideration on those types of weeds that cannot be treated with pre-emergents and are only controlled by post treatment. Most of these types of weeds must have multiple applications of herbicides in order to be effective. The most critical aspect of controlling these types of weeds is the timing of the following applications. If they are not performed according to manufacturer's recommendation you will have lost all the time and money from the previous applications.

Timing is everything.

The most labor-intensive aspect of this weed program is the mechanical removal of the weeds. I find this has several advantages when dealing with mature plants. With the instant removal of the weed, the adage "out of sight out of mind" is very true here. Not only do you immediately get rid of the weed but you don't have the recurring irritation of viewing them for two to three weeks as they turn brown and die.

Another advantage is the reduction of future populations of the weed species. Due to the fact that mature weed plants are in the reproductive stage, by removing the plant you are also removing thousands of weed seeds which, if left on the ground after spraying, would be spread to other parts of the golf course.

One of the time periods we pay particular attention to is when we aerify. By opening holes in the turf and bringing up soil which is by no means sterilized, I believe we simply make the weed situation worse by spreading this soil which is full of weed seed all over the golf course. After the fairways are aerified, we will make a pre-emerge treatment to prevent the weeds from taking hold.

We go at the lightest rate possible of the chemical we are using which we feel will give us adequate weed suppression. I must say however that I do not apply any pre-emergents on the greens at any time, only post-treatment for these areas.

All of the herbicides in the world will be of little value if you don't have and utilize a proper fertility program. The dense, thick turf is likened to a steel plate which creates an impenetrable barrier to the encroachment of weeds. This barrier can

HERE'S SOMETHING TO REFLECT ON...



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Pennington Seed, Orlando. 407-295-6271 Sunniland, Sanford. 407-322-2424 TIECO, Inc., Panama City. 904-434-5475 Vigoro Industries, Winter Haven. 813-293-3147 Woodbury Chemical, Princeton. 407-291-4114 only be achieved by implementing a sound nutritional program. What type of program you implement does not matter, only that you develop a good program and stick with it. As one superintendent told me, "Program the work then work the program."

There are some nuisance weeds which are very troublesome and difficult to get rid of. One of these weeds is water sedge. What makes this weed so difficult are the conditions that make it so prevalent. Being in an area that receives over 60 inches of rainfall each year, we find ourselves in an ideal environment to reproduce this plant.

Another aspect to consider about this plant is the soil and drainage condition of your golf course. My soil conditions are basically peat and muck which pretty much tells you what the drainage conditions are. At times during the summer we will not be able to mow large areas of our golf courses for weeks because of wet soils. This creates the perfect environment for the proliferation of water sedge. I have completely cleaned up fairways only to have them reinfested within three to four months. And I have tried everything on the market labeled for weed but nothing has been effective in preventing it from recurring.

I began this article about what a weed was and the pressures we face as turf managers to make our golf courses weed free. I think that 100% weed-free turf is not always obtainable. I think that the days of unlimited herbicide usage in attempting to attain this goal will soon be gone. I believe that the golfing members of our clubs must deal with reality and the conditions at their golf courses and adjust their attitudes on purity of turf.

I'm not suggesting we don't do what-

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I say this because our use of chemicals is coming increasingly under criticism and scrutiny from the general public. And I firmly believe that certain weed species are perfectly acceptable on the fairways and roughs from a shotmaking perspective and has no adverse effect on the game. I feel that we have to get away from applying herbicides strictly for aesthetic purposes and to utilize them for their intended purpose, when they benefit the game of golf.

I believe there are far too few turf managers out there who utilize the IPM approach. Much greater usage of mechanical removal in the weed-control program should be in use. If we don't start taking some of these steps now, when the hammer falls on some our mainstay herbicides we are going to be at a loss as to what to do and how we get our members to accept less pure turf.

That time will surely come and you and I will be around to see it.

From where I sit, I see golf courses being used more and more as recharge areas for the municipal water supplies. This will surely draw increased scrutiny from the environmentalists and general public on what types and amounts of chemicals we are using on these areas. Up until now we have fended off wholesale restrictions on our pesticide usage but the time will come and we need to prepare for it.

Studies by governmental regulatory bodies such as the one we are involved with now will become more common over the next 10 years. We need to continue our cooperative efforts with these agencies and show them we are taking the right and prudent steps in our application of chemicals. Trying to achieve 100% purity of turf is not one of those steps. Yet a movement of moderation and acceptance of less than perfect conditions will show our actions are going in the right direction.



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See your Floratine distributor for further information on other soil applied products, including:

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AFTERWORDS

Through the looking glass A view into the new — and sometimes hostile — Regulatory Wonderland

BY LARRY COFFMAN

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F or several years a regulatory volcano has been rumbling. On Jan. 13 the volcano erupted unnoticed amid the fanfare of the Presidential Inauguration, with publication of OSHA's Final Rule covering Confined Space Entry.

Like the volcanic eruptions in the Philippines last year, which scientists tell us is changing the global climate, the Regulatory Volcano will change the regulatory climate during the "Administration of Change." Through our looking glass we see many "seismic" events approaching and among the magma we see the OSHA Reform Act approaching the surface, which will criminalize noncompliance which results in death or serious injury.

It has taken so long for OSHA to finalize its Confined Spaces Regulation, we have become immunized to the expectation of its ever happening and now that it is a reality, it may be going unnoticed, while the effective date (April 5, 1993) is rapidly approaching.

Are you aware that discovery of noncompliance by the effective date of an applicable rule even some time later is a failure to comply? Here is a chance to avoid what appears to be a certain regulatory distress. Take the first steps toward compliance now.

Confined Spaces are not what our minds tell us they should be, the way this rule is written. We think of confined spaces as sewers and tanks and the like. Not so!

The new definition of a confined space is:

(a) any space on the workplace premises which is not designed for continuous employee occupancy

(b) where there is limited or restricted means of entry and exit

(c) where an employee can bodily enter and perform a work task

A Hazardous Confined Space is a confined space where there is or may be a hazardous atmosphere (actual or potential), and/or any other actual or potentially serious safety or health hazard. Lose an argument with OSHA over the word *potential* and you could be looking through bars instead of the looking glass because this is the basis of this new regulation.

Imagination plays an important role in "Regulatory Wonderland." You must try to imagine any potential which could classify a confined space as a Permit Required Confined Space subject to regulatory enforcement. Permit is the magic word. If you don't take imagination seriously, you can't imagine the problems you will be forced to deal with.

If a confined space has any actual or potential hazards associated with it, you must designate the space as a regulated space and post a sign reading: "Danger-Permit Required Confined Space. Do not enter."

Now comes the tough part. You have to "develop and implement" a written compliance program describing in specific detail how you will comply with the many requirements of this new regulation, unless you are classified as an Agricultural, Construction, or Maritime employer. Agricultural Services is not an exempt category, however.

If you have been conforming to the requirements of Florida Administrative Code Rule Chapter 381-20, forget it. The new regulation preempted State Rules.

OSHA gives you a choice to permit your employees to enter a regulated confined space or to prohibit them from entering and resorting to outside contractors. Don't think this provides you with a way to avoid having to develop and implement a written program, however, because construction contractors are exempt so you will be holding the bag. Any confined space entry on your premises requires that you have a written program to coordinate activities in accordance with your program. Gut wrenching, isn't it!

Time is running out. You'd better get started and list any location on your workplace premises which fits the confined space definition - then evaluate each of them for their potential for being regulated under this new rule. Document your survey and your determinations and your reason for making those determinations. If you decide that you have a confined space which is or could be classified as a regulated space, put up a sign, inform your employees to stay out (or else), and get started on your written program, and for heavens sake, don't let somebody convince you that their idea of a fill-in-theblanks program is going to give you an E Ticket Ride in Regulatory Wonderland. They haven't looked through the looking glass and seen the "changes" to realize that the regulatory volcano is erupting.

Be careful of those who give advice about something they know little about - particularly where they haven't sat across the table from OSHA in resolution conferences. This new rule and those which are about to follow is expected to bring many unemployed and unqualified so-called consultants out of the woodwork looking for a gratuity. Check with Florida Administrative Code Rule Chapter 38I-10 to assure those who may advise you are "qualified to consult." The telephone number for the Florida Division of Safety is 800-367-4378. Ask OSHA to send you a copy of the new regulation. It is 29 CFR 1910.146. Your call won't trigger an inspection.

Larry Coffman, is president of Compliance-Masters, Inc., P. O. Box 559, Floral City, FL 34436. 904-799-1589. According to university tests in Florida, BAYLETON fungicide controls bermudagrass decline. In fact, it's the only fungicide registered for control.

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From the twin towers of the Department of the Environmental Revolution to the Governor's office, this has become one of the most complexing problems yet to be addressed.

Who's water is it — anyway?

BY TOM BENEFIELD CGCS Some months ago I wrote for the *Florida Green* an article about how the water management districts were starting the process of forcing the waste water re-use issue through rule implementations in their water use permits. I spoke at the time on the merits of re-use water and how utilities under pressure from the water districts were developing their re-use plans. This article is a follow up to the one previously printed. For the next few minutes, I will share with you the current status of this resource impacting issue.

First off, let me point out one of the more positive aspects of the re-use problem. It has brought the water management districts closer together in terms of their rules. There is a big push from the capitol to have all of the five districts operate under the same rules and criteria. They have been meeting on a monthly basis discussing the theories and concepts behind their local rules. I believe we will see one set of rules come out of this process which will be adopted by all five districts. After reviewing the rules from all five districts, I have no doubt that the fairest and best set of rules of any of the districts is the rules from the South Florida Water Management District.

The main focus now is the problem of who is going to pay to implement the rules the water districts have written. The plans and programs the utilities have developed will begin shortly with some already in motion. As you see the next 24 months roll by, you will notice an increase in activity by these companies as they attempt to sell you not only on the idea of re-use but also on your paying for the cost of "implementing their programs."

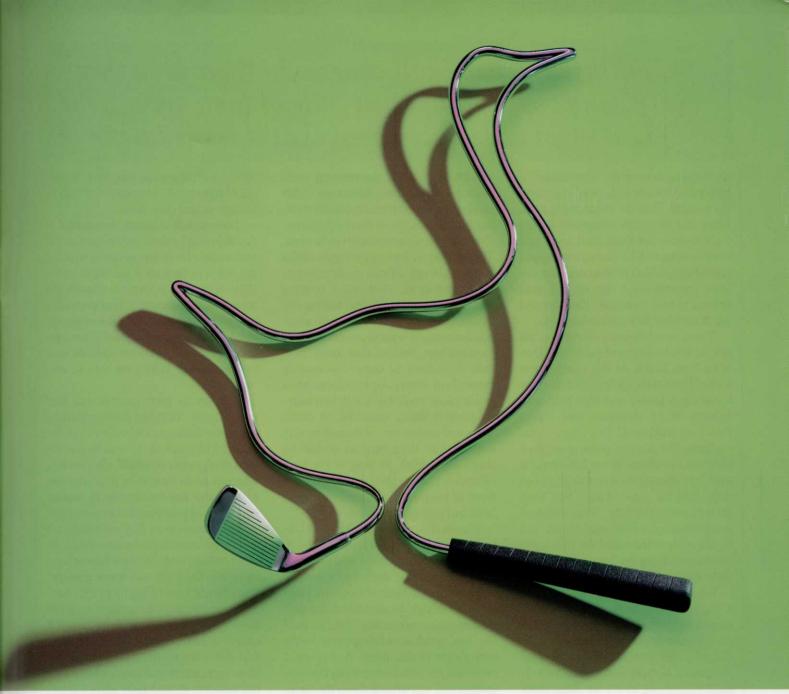
Every one of the utility companies will come to you with the same pitch: that you should pay for this water because you are the beneficiary. However, we all know that there is a far greater beneficiary than us, the "urban population and its environment." By re-using their waste product which they are paying to have dumped either in the ocean or their deep well system, we are providing them a desirable alternative benefiting both them and nature. I don't believe that anyone should have to pay to dispose of someone else's waste.

I live in Martin County where we have a creative (this is what the commissioners call it) garbage re-use program. We separate our glass, paper, and aluminum from the rest of our garbage and set it out for weekly pickup. We do not get paid to do this, quite the contrary, we pay them. Yes, imagine that we pay someone to dispose of our "recyclable waste" just like we pay them to buy the rest of our garbage. And my friend, waste is waste whether it is a solid, liquid or gas.

But yet, the utility companies, which include a lot of elected officials since all of the public utilities are operated in essence by the county or city commissioners via the various directors, feel that in the case of their wastewater the rules should be different. They like to ignore the basic facts of the issue and are working feveriously to legalize their own agendas which are full of "political ambitions" with no solid, concrete, rational or logical information to support their position. The old political feasibility game is the only tune they can play, looking at the short-term, never in terms of what is really best for the people. Sometimes the best medicine to take is the most bitter.

This issue of who is going to pay for implementing these re-use programs has drawn attention in Tallahassee. From the twin towers of the Department of the Environmental Revolution to the Governor's office, this has become one of the most complexing problems yet to be addressed. It has become so complex the different agencies in the capitol, as well as the water management districts, have asked the Public Service Commission to investigate the possibility of taking over statewide responsibility of rate-making for the cost of this "commodity."

Not only have they been asked to look at wastewater pricing (if any) but they have also been asked to determine if there is a need



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This utility is telling golf courses in their area that "every golf course within one mile of their treatment plant must use wastewater, that it is the law."

for them to oversee the rate-making of both potable water and sewage charges of the utilities. This, my friend, is big news. News that the utility companies do not want to hear. All these local municipal governments and their crony lawyers and consultants rolling around deckside like loose cannons on a ship do not want anyone to look over their shoulder and tell them what they can and can't do.

There was a meeting recently at the district headquarters of the SFWMD in West Palm Beach. At this meeting was the legal staff of the PSC, district staff, just about every lawyer and high paid consultant in 16 counties and David Demmery and myself. One utility representative after another got to speak their piece on the affects of the PSC looking over their operations. Every single one of them said the same thing, "We don't want or need your help." They believe it would cause a duplication of services and higher costs to them and the PSC is too far removed from the "local" situation to make a fair evaluation.

It is easy to see why they do not want a "big brother." The very first thing PSC involvement would do is have people of the community asking their elected officials why they need these high-powered overpriced lawyers and consultants. If the PSC is going to set the rates, there would be little need for these other people.

I mean why do you need someone for court action if the PSC settles all disputes? Why do you need someone to tell what to set your rates at if the PSC does it for you? The only duplication of effort would be when the municipalities go out and hire someone to do a service which will already be provided to them free of charge. The big problem with this proposal is not the PSC but yet the "good ol' boy" network of lawyers and consultants and the inept ability of the local governmental officials both elected and appointed. The breaking up of this "pork chop" style of conducting business is at the heart of the matter.

Case in point is the meeting itself. Sixteen counties plus numerous utility companies were represented at the meeting but 80 percent of their representatives were either consultants or lawyers. The majority of the counties and utilities had no elected official or department head there at all. Here was a meeting where you would think that maybe, just maybe, the utility director or county commissioner might want to attend. But they were too busy. Besides, they could "pay" their consultant to come - wasting more of our money. And the consultants and lawyers? Well, it is in their best interest to have things unsettled, to create havoc and controversy. If the matter were settled, then their services would no longer be needed. As long as our local officials are taking their cues from these types of people, we will never progress from our present condition.

I listened carefully that afternoon taking in what each of the speakers had to say, then I took my turn. I told the panel from the PSC that there was a definite need for them to become involved. I told them of the high-handed tactics the utility companies were using. I told them of the "lies" which were being spread by the very people in that room. As I spoke, I could tell the panel was paying close attention and was writing down the issues I spoke of.

One of the things I told them was how a local utility was telling golf course owners blatant lies about the re-use issue. This utility is telling golf courses in their area that "every golf course within one mile of their treatment plant must use wastewater, that it is the law." Well, it just so seems that there is no law of this nature. As a matter of fact, the water management staff were quite concerned at this news in that they are the only agency in the state which can create water policy and rules to implement their policy. The utility is spreading outright lies and using a tactic of fear and intimidation to get the golf courses to sign agreements on their terms. And, of course, this utility is paying a huge chunk of taxpayers' money to its high-priced consultant.

There was one county represented at the table only by their utility director. He spoke about his re-use program which is the oldest in the state if not the country. His program also is the most efficient and reuses more wastewater than any in the eastern United States. What was the key to this seemingly perfect plan? What were they doing that the other utilities were not proposing? Why were they so successful?

The key to their success was very simple, really. They had determined long ago where the financial burden was to be placed. They took the time to look at the facts of who was creating it, who was not, who was available to offer large acreages of land and the circumstances around why they had to implement a re-use plan.

The reasons from they went to re-use was no different than the reasons all the other utilities in the state are having to go to re-use: the DER and water management districts are telling them they have to. They are not telling them to go to these programs because there is a golf course or orange grove down the street that they want to use. Not quite, simply these agencies are sick and tired of seeing this resource thrown away when it could and should be reused.

And the key to the great success of this number one re-use program in the southeast is also very simple. They don't charge one red cent for the wastewater. They pass all of the cost associated with the reuse program back to the people who created the problem in the first place. They made a practical, rational decision, not a political one. And as the county has grown, they have continued on this same track. As the utility director said "why fix it if it ain't broke." The big fear that this official had was the PSC might attempt to make him charge for the wastewater and result in a cutback on the amount used. For he understands that the more he puts