A good superintendent is able to relate to his superiors on their level. For the most part, they (owners, managers, chairman) are, or have been, highly educated successful businessmen. It is necessary to present data that makes logical financial sense and can show significant course upgrade or at least keep the course maintained to proper standards.

A good superintendent will give his golfers the best course for the money spent. He can also show where increased funds will produce a better product, and has the ability to spend these funds wisely.

A good superintendent is a good investment.

Instead of talking in depth about all the technical aspects, I wish to highlight the intangibles. How does a good superintendent coalesce and communicate all of this information to his maintenance crew in an effective manner? How does he translate his knowledge of turfgrasses to the unique conditioning of his golf course for his golfers? Also, how does the superintendent coordinate all his communications to his greens committee, board or owners?

Much of this boils down to the hard fact that a superintendent must be able to sell his ideas, concepts and technical knowledge to a lot of different people. I can sit here all day and know that I may be a good golf course superintendent. I may possess all the knowledge, perception and common sense that it takes to get the job done. However, if I cannot convince the maintenance crew, golfers and those to whom I report, it will be difficult to excel at my profession.

The maintenance crew must be an extension of the superintendent's maintenance procedures. Each of us have basic maintenance practices that are adhered to industry-wide. Then there are particulars that distinguish superintendents from average, better and best.

It is imperative that we be able to communicate to the workers who are actually performing the work, what it is we want done, how to do it and, of equal importance, why. We will only be as good as the people who do the work. I do not believe any of us would tell a new employee to just hop on a greensmower and mow greens.

It must be explained to the employee how the machine works and its function. The employee must be shown how to operate the mower and then be watched while he operates it. He has to know how to make the first pass on the green, how to make a straight line, which direction to mow, and how to make a clean-up lap. He must know how the mower should leave the green. He should know what to look for in a hydraulic leak, not to overfill the gas tank and how to tell if the engine is operating properly. He should know what is cutting properly, and what it looks like if it is cutting im-

Most importantly, he should know why all of this is being done. A good superintendent can communicate all of this information so that the person doing the task is an extension of the superintendent. The worker should have the knowledge through proper training to do the job as well as the superintendent.

Once all of this knowledge is communicated and demonstrated, there must be a system of checks and balances or follow-up to insure it is being done correctly. In this manner, the job will be done effectively and to the quality standards a good superintendent would desire.

As you can see, comprehensive communication is the key to insuring things get accomplished in a timely and accurate manner. A different type of communication is necessary when dealing with your mechanic and problems that arise with equipment.

It is usually quite easy to know when a piece of machinery is operating improperly, whether it be engine-related, quality of performance or cutting ability. It is important that a superintendent can properly explain the malfunction of a piece of machinery to his mechanic. An "it doesn't mow right" symptom is vague and ends up taking a great deal of the mechanic's time troubleshooting things that may not be wrong. Be specific. Seek out specific symptoms and then let the mechanic use his expertise to correct them.

Quite often, by taking the mechanic on the course when the equipment is operating, or better yet, letting the mechanic operate it, is the best way for each party to understand equipment shortcomings.

There are good superintendents who have a good basic understanding of equipment operation and repair. And there are even some excellent superintendents who could be successful mechanics if they chose to be in that trade. However, most golf course superintendents would probably like to understand more about the mechanical end of the business.
In recent years a localized decline and death of turf has been observed on bermudagrass greens. The symptoms first appear as chlorotic yellow patches, 8 to 24 inches in diameter. The turf begins to thin out, and eventually a bare spot will develop. It is common to see green shoots next to chlorotic shoots in the area around the edge of the patch. Affected areas have very poor root systems and a lack of rhizome development. Articles about Bermudagrass Decline with photographs were published in Florida Turf, Summer, 1982 and Grounds Maintenance, October, 1982.

Research on this problem has concentrated in three basic areas. First, a number of chemical treatments have been evaluated for control of Bermudagrass Decline. Last year the compounds were sprayed on the turf surface. This year, we are injecting several fungicides with a nemacert to place the chemicals more effectively in the rootzone. To date no chemical control has been found. The second phase of our research is searching for possible causal agents of the decline. Bacteria studies are still continuing to determine why large populations have been found in bermudagrass turf. Also, we are investigating a brown fungus that has been found repeatedly on roots in affected areas. Thirdly, we are collecting data from superintendents on when the problem occurs, their cultural practices, turf and soil conditions, and control measures they have tried.

The best recommendation at the current time for control of Bermudagrass Decline is a cultural one. Aerification is extremely important to open up the soil and allow oxygen into the rootzone. Use an aerifier that will deeply penetrate the turf. Aerify as frequently as possible, every 3-4 weeks during the growing season. Next, topdress and work it into the aerifier holes. Topdressing will also help mask some of the damaged areas. Application of a non-ionic wetting agent also is important to help water penetrate the soil, especially if there is a thatch layer. By following these practices when the chlorosis symptoms first begin, it is possible to check the problem. If Bermudagrass Decline is a re-occurring problem, these cultural practices should be followed throughout the summer.

Editor’s Note:
At the research update on Bermudagrass Decline held on August 29th at Atlantis Country Club, Ed Freeman warned of the dangers of Pythium infections on high sand content greens. The following article by Dr. Clint Hodges from Iowa State University is quite informative and timely.
Newly elected officers of the Treasure Coast Chapter are from left to right: Joe Briguglio, Secretary (Indian Hills, Ft. Pierce); Chuck Pinkett, Director (Miles Grant, Stuart); Craig Baker, Vice President - Internal Affairs (Indian River Plantation, Jensen Beach); Adam Yurigan, Jr., Vice President - External Affairs (John's Island, Vero Beach); Bill Mangold, Treasurer (Martin Downs, Stuart); Jim Callaghan, Immediate Past President (Riomar, Vero Beach); Joe Snook, President (Riverbend, Tequesta); and Robert Hurst, Director (Jupiter Island Club, Hobe Sound).

**ARE YOU ZEALOUS, CONSCIENTIOUS?**

**WATCH OUT**

If you should happen inadvertently to see a letter or memo from your boss describing you in flattering terms, don't run out and start spending the raise you are sure must be forthcoming. The boss may be speaking with forked tongue.

E. James Brennan, a St. Louis personnel consultant, reports in Personnel Journal that employee-relations executives, in order to write frankly about people without fear of the communications falling into the hands of those being written about, sometimes use a secret language of their own.

Some tongue-in-cheek examples of phrases whose true meaning is supposedly shared by those in-the-know:

<table>
<thead>
<tr>
<th>Personnel Code</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Exceptionally well-qualified&quot;</td>
<td>Made no serious blunders yet</td>
</tr>
<tr>
<td>&quot;Careful thinker&quot;</td>
<td>Won't make a decision</td>
</tr>
<tr>
<td>&quot;Strong principles&quot;</td>
<td>Stubborn</td>
</tr>
<tr>
<td>&quot;Spends extra hours on the job&quot;</td>
<td>Miserable home life</td>
</tr>
<tr>
<td>&quot;Average employee&quot;</td>
<td>Not too bright</td>
</tr>
<tr>
<td>&quot;Active socially&quot;</td>
<td>Drinks too much</td>
</tr>
<tr>
<td>&quot;Zealous attitude&quot;</td>
<td>Opinionated</td>
</tr>
<tr>
<td>&quot;Takes pride in his work&quot;</td>
<td>Conceited</td>
</tr>
<tr>
<td>&quot;Uses logic on hard problems&quot;</td>
<td>Finds another to do the job</td>
</tr>
<tr>
<td>&quot;Forceful&quot;</td>
<td>Argumentative</td>
</tr>
<tr>
<td>&quot;Not the desk type&quot;</td>
<td>Did not go to college</td>
</tr>
<tr>
<td>&quot;Conscientious&quot;</td>
<td>Scared</td>
</tr>
<tr>
<td>&quot;Meticulous attention to detail&quot;</td>
<td>Nit-picker</td>
</tr>
<tr>
<td>&quot;Of great value to the organization&quot;</td>
<td>Gets to work on time</td>
</tr>
<tr>
<td>&quot;Has leadership qualities&quot;</td>
<td>Is tall or has a loud voice</td>
</tr>
</tbody>
</table>

Supplemental fertilizer being applied to a green with Liquid Ag Green and Tee Applicator
The description of a Golf Course Superintendent is truly unique. Few other managerial positions within any industry require such diversification of knowledge as that of a Golf Course Superintendent. One most obviously have "a little knowledge in Horticulture"; however, this is only the beginning. Expertise must also expand to many other areas such as: management, accounting, business transactions, secretarial, public relations, psychology, chemistry, technical analyses, design, irrigational, mechanical, ecological, and any thing else just short of being god-like, because you always are supposed to at least "have a green thumb."

Considering there are over a hundred golf courses in Palm Beach County, very few courses are truly similar in nature, the span goes from public to very exclusive private courses and from 9 hole to 90 hole complexes. With such a diversification of knowledge and courses, is there such a thing as a stereotype Golf Course Superintendent? Well, of course not! Superintendents are probably some of the most unique people in the world! I have asked many Superintendents in Palm Beach County the question "Why are you unique?" Considering there are over 100 courses in Palm Beach County, what is it that makes you uniquely special in comparison to your peers? Just why do you exceed better than anyone else? These questions were asked without being quoted to allow the individual the freedom of revealing their true inner feeling, without the fear of embarrassment. Replies are as follows:

"I try to make my people happy, whether they are the workers, the members, or my boss. I treat people the way I would want them to treat me, because I am in a service business. This is maybe not unique, but the attitude I feel is unique, because I care about service. For example, if the members desire to have trees, we plant them. If they desire to have them removed, after mutual discussion, we remove them. I am not necessarily a 'yes man', but rather a service oriented Superintendent. Since Greens Committee Chairmen change yearly, goals, objectives, and areas of concentration change yearly. If the Superintendent can not visualize and accept the changes, then he is not performing a service to his Club."

"Having the broad knowledge of all phases of golf course maintenance, from construction through the aspects of maintenance of both northern and southern turf management programs, I feel that being able to use these experiences on a day-by-day basis, and relating this to the work crew, I can get the most out of my crew and make the course look the very best within my capabilities."

"I have the ability to communicate with the working management personnel at their levels. I have the ability to set up programs, whether they be for management, personnel management, or developmental projects and see that they are followed through with completeness and..."
thoroughness resulting in a product of the highest standards."

"I know what my objectives are, and I use all the means available to accomplish my goal, which is to have it perfect. I put 100% of my energies toward accomplishing that goal."

"I am a perfectionist and my inability to accept mediocrity produces constant frustration when dealing with mother nature. Because of this difficulty, I must constantly be striving for the best product available within my ability."

"I am a very good golfer and I feel that I can play as well as many of the club Professionals. I look at the golf course from a good golfer's point of view. I look at the height of cut, quality, contour of fairways, placement of trees, and thereby look at the points of view from not only aesthetics, but from the point of play from the low handicap to the high handicap."

"I am good at getting the required job done by employee motivation. Even though the laborers low pay, along with the lack of professional skills, makes getting the job done most difficult. Considering these restrictions within my capabilities, I am able to overcome these problems and perform a job well because of my ability to motivate within. Motivation is the key to my success."

"I have the ability to maintain an above average golf course for an elderly membership that is not appreciative nor knowledgeable about the agronomics of maintaining a small, tight golf course."

"I have the ability to respond to adversity under pressure. I am able to maintain a level of consistency year round, even though the diversity of foul weather and the amount of heavy play can have diverse effects upon the golf course. There are so few Superintendents that are subject to my unique problems of an old course with heavy play, yet be able to maintain above standards for consistency of play."

"I enjoy communication on a regular basis with other Superintendents while I solicit and advise opinions regarding our industry. I want my golf course to be the very best as I will not tolerate problems, while other Superintendents will allow things to just slide by."

"I have the patience and flexibility to deal with various personalities and individuals at a private country club, whether they are the laborers, accounting department, board of directors, golf pros, club manager, or my superior, the greens committee chairman. This gives me the ability to produce excellent playing conditions year-round."

"My position as a Golf Course Superintendent exists because of the fact that I've had a good education in turfgrass management and I've had a chance to work under a first class Superintendent. Although I'm young, and have not had many years of practical experience, my desire to learn and work many long hours has propelled me quickly through the ranks to become a Superintendent."

"Rather than settling for the ordinary, I strive to set a precedent of professionalism as a golf course manager that others will look toward as unique, but achievable objective, which is to make the golfing experience as enjoyable as possible to the membership and their guests. I also want my maintenance operation to provide an enjoyable learning experience to my employees with the intent to create a strong sense of pride regarding job performance."

"I have the ability to be in charge of a complex of large magnitude at a rather young age, which reveals to upper management, an ability to supervise with maturity. Because of this freedom, I am even more aware of my power and I capitalize on the advantages of this fact. I do not abuse my privilege, but rather more acutely manage to the best of my ability, which I feel is better than what anyone else could do."

In summary, I believe there is a common denominator regarding the dominant attitude of Golf Course Superintendents. (Continued on page 16)
YOU'RE LOOKING AT 365 DAYS OF BROWN PATCH CONTROL.

It's that time of year when Rhizoctonia (Brown Patch) can break through your overseeding defenses. But not when you use CHIPCO® 26019 turf fungicide. You'll have fewer disease problems and healthy overseeded greens when you include CHIPCO 26019 fungicide in your program. Also, additional sprays of CHIPCO 26019 during the year help make a smooth spring transition.

* Under normal conditions, two bags of Chipco 26019 are sufficient to treat an average size green for 365 days.

EVERYTHING'S UNDER CONTROL.

CHIPCO 26019 Turf Fungicide

(Continued from page 15)

We are individuals of total dedication to a profession that we are keenly proud of. We do not want to be stereotyped as "just people who supervise the mowing of the grass," but rather "managers of a highly sophisticated and technical science of golf course management." We are individuals with creative minds that must constantly be one step ahead of the membership and management. Because of this mental awareness to constantly be on top of a vast amount of land both agronomically and financially, we find ourselves constantly being mentally alert, innovative, and seldom going out and just having a "relaxing round of golf."

Lofts Presents Rutgers With $27M Royalty

Bound Brook, NJ — Lofts, Inc. recently presented Rutgers University with one of the largest royalty checks New Jersey's state university has ever received. Jon Loft, Lofts President and Chairman of the Board, presented a check for $26,764.02 to Dr. Lowell A. Douglas, Chairman of the Department of Soils and Crops.

The check represented a total of the royalties due on all seed from the 1982 harvest of Mystic Kentucky bluegrass, and several perennial ryegrasses - Palmer, Diplomat, Yorktown and Yorktown II (Domestic and European). All these varieties were developed at Rutgers University.

Mr. Loft described the occasion as "another link in the continuing chain of turf developmental programs between Lofts and Rutgers." The royalties play a role in the development of new varieties, because the money is used to sponsor further research and education.

At the ceremony, which took place on September 8, Dr. Douglas expressed his appreciation for Loft's cooperation. "The development of new varieties becomes more meaningful," Dr. Douglas noted, "when a company like Lofts promotes them, because Lofts' involvement increases public awareness that new varieties are available."

Also present at the ceremony were Rutgers researchers Dr. C. Reed Funk, Dr. Ralph Engel, Dr. Henry Indyk and Dr. Robert Duell. In addition, Lofts was represented by Dr. Rich Hurley, Vice President and Director of Research and Agronomy.

The presentation was held at Rutgers Horticultural Farm II on Ryders Lane in New Brunswick.

A similar ceremony occurred in August at the University of Rhode Island. At the University's Field Day, Dr. Richard Skogley was presented with a Lofts check for $14,900. This represented royalties for one year's crop of Jamestown Chewings Fescue.
Woodbury Chemical Company's roots are in Florida, and for over 15 years we've been servicing the golf course industry. We concentrate our business in Florida because we believe that's the best way to keep in close contact with our customers.

Florida's subtropical climate means special problems and our technological know-how can make the difference. We provide horticultural programs to insure strong, healthy, green grass.

You name it, we sell it. Pesticides, fertilizers, seed, and a complete line of adjuvants. Let our highly trained sales team work with you to individualize a program for your golf course. We competitively price our products and back it all up with reliable service.

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**PROFESSIONALS AT WORK FOR YOU**
Pine Tree Decline Research

Funded by Quail Ridge C.C.
By DR. CHARLES H. PEACOCK
Extension Turf Specialist — IFAS

Pine tree decline is a serious problem on golf courses in Central and South Florida. A recent poll of golf course superintendents indicated many had a serious decline incidence with 30% responding they had experienced the problem. Of these, 77% indicated they had a moderate to high incidence of the decline symptoms. The decline begins as a yellowing of the trees, followed by a gradual loss of needles leading to death of the tree. A research project awarded to Drs. Charles H. Peacock and Roger S. Webb, Assistant Professor of Forest Pathology, with the Institute of Food and Agricultural Sciences (IFAS) at the University of Florida, Gainesville, by the Florida Turfgrass Association (FTGA) Scholarship and Research Foundation focused on screening potential causes of the decline syndrome. This work involved sampling on four golf courses. Included were Royal Poinciana C.C. and The Club at Pelican Bay (Naples), Grenelefe (Haines City) and Quail Ridge C.C. (Boynton Beach). Needles from healthy and chlorotic trees and soil samples from the perimeter of the trees were analyzed for pH, soluble salts and nutrient content. Samples were also collected from irrigation water sources to check pH, conductivity for soluble salts, and hardness. This work was completed this past spring.

The Quail Ridge Country Club Greens Committee and Property Owners Association has carried this one step further by funding an applied study to determine if an effective method can be found for treating this problem. This commitment for a three-year study will provide $25,000 in research money for this project. Quail Ridge is a very tree-oriented landscaped community. Concern over the loss of native trees prompted Superintendent Tim Hiers to spearhead the funding of this project. He and agronomist Sathena Cabler are working in close cooperation with Drs. Peacock and Webb. (Ms. Cabler noted that Quail Ridge has a severe problem, and is continuously having dead trees removed.) Work was initiated at Quail Ridge the week of 31 May - 2 June. Trees were identified and treatments applied based on the results of the initial FTGA project. The Quail Ridge study is designed to ameliorate the decline of pines that is apparently associated with intensive landscape maintenance practices.

(Continued on page 19)
Treatments have focused on correcting nutritional deficiencies associated with the trees by one of two methods: Direct injection of nutrients into tree trunks or soil drenches of nutrients into root zones. Dr. Webb has had success with injection methods on pine trees in South Florida. The soil drench treatment would be favored for a variety of reasons including lower cost, less labor involvement and less wounding of trees, but it has not been field tested as to reliability. The soil drench treatment included 15 combinations of 4 nutrients alone or in combination. This will test which single element or combination is most effective in correcting the problem, providing a soil drench treatment can be effective.

Periodic evaluation will closely monitor progress of the trees and treatment areas. Dr. Peacock is especially interested in monitoring treatment effects on turf surrounding treated trees. This is an exceptional project Quail Ridge has undertaken in joining with the University of Florida to research a persistent and damaging problem.

It is hoped this study will lead to definitive treatment for correcting the decline problem. As research results are evaluated, more information on cause, effect and treatment will be made available.
The Path to Excellence

It's an easy enough question: What makes an outstanding golf course Superintendent? The concept is a common subject of discussion among Superintendents, but the true depths of the inquiry are demonstrated by the frequency with which we ask it of ourselves. Everyone's answers are different and mine are likely no better than your own. However, perhaps my thoughts can throw a little different light on yours so we can grow closer to an answer that is agreeable to everyone.

Our field draws upon the common knowledge of such a vast and varied group of professions, that it is often scary. How can one man stay well versed as a soil scientist, environmentalist, agronomist, entomologist, personnel manager, accountant, salesman, horticulturist, civil engineer, et al. The answer is, you cannot. However, if you're a good student and industrious in your efforts to better your abilities, then you can and must borrow from each of these fields. You borrow that which applies to you, your profession, and your operation. This task, too, is difficult, but not insurmountable. Other individuals and organizations are also collating this information. In fact, the real advantage to participating in professional organizations is the opportunity to share in their resources. The effort an individual puts forth in building his base of knowledge will determine the level of his personal achievement.

If you could find one quality that every excellent turf manager shares, it's his strong decision-making ability. Many tough decisions must be made on a seasonal and daily basis and no one can make good decisions if he is uninformed. When to topdress? How heavy? Do I have enough potash in the program? Should we go with tess frequent applications of slow release fertilizers? How to hire ... when to fire? Is Mr. Foreman worthy of a promotion? Do we need an 8% budget? What will be given up if the budget must be cut? Quality decisions make for quality golf courses.

Accumulating knowledge and making decisions is hard work. Which brings us to another attribute shared by the finest Superintendents, they are industrious, they enjoy their work and they put forth maximum effort. They appreciate these qualities in those they delegate work to.

Finally, the best Superintendents pride themselves on their connections, both private and professional. They belong. They share.

The abilities of the elite of our profession are based upon the wealth of knowledge shared by all of us. It is all but impossible for an individual to transcend the limitations of the professional culture we inherit. When clever individuals pride themselves on their own isolation, we would do well to doubt their cleverness. How much better to work within the culture to raise the base of common knowledge, so that we all may reach for that higher plateau. I doubt the golf course Superintendent exists who cannot gain from allying himself with any of the fine professional turfgrass managers' associations.