- and Paul's crew - asking for help while Paul was in the midst of a major renovation project on the golf course.

The 10th tee had to be relocated because of a change in the clubhouse. Because the construction had fallen three months behind schedule, the landscaping was installed during the winter salt spray.

High Ridge: Dave got caught in a jurisdictional dispute between permitting authorities.

City building inspectors shut down renovation of the 10th tee, claiming the work was tied into the clubhouse permit. They also halted dredging of a nearby lake.

It took weeks before officials from the South Florida Water Management District and the Lake Worth Drainage District could convince city officials that they had no jurisdiction over the lakes.

Banyan: To help contain trash and control traffic, Dan and Glenda put up a fence around the construction area and enforced the traffic patterns very strictly.

What would you do differently?

The Falls: We took on the responsibility of irrigation installation, earthwork and landscape installation. Many of our workers exceeded 70 hours a week for more than two months and I ended up in the hospital over the holidays. I'm not sure I'd do that again.

I remember the morning we were applying Nemacure to the greens only to find that the electricity for the irrigation pumphouse had been shut off manually the night before because the finish contractor said his cement was getting wet and he couldn't find us.

Yeah... we left at a quarter 'til six earlier than usual - and he couldn't find us during the day!

Palm Beach: Paul was in the process of wrapping up the finish cement work with a local paving contractor when an inspector casually asked if he had had a nuclear density test performed on the cement.

It took some time to convince the inspector that the cement was for cart paths, not walls of the building.

Banvan: A few weeks before expansion was to begin, the members voted to delay the project for a year. "Dan, can you put back all those plants you ripped out, replace the irrigation system and throw down some seed that'll get us by until next year?"

High Ridge: Last year, Dave installed a practice green what he thought was far enough from the construction. Now the green just skirts the latest expansion and he may be redesigning the redesigned practice green.

EDITOR'S NOTE: Mike Bailey, superintendent of The Falls CC, Lake Worth, is editor of The Green Sheet, the FGCSA bimonthly newsletter, and a member of the FGCSA Publications Committee. He is active in the Palm Beach chapter.

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Personality clashes can be prevented

The trick is to identify the different personality types on your staff and learn which combinations work well together... and which ones are deadly

BY LARRY KIEFFER

LAKE BUENA VISTA — The manager who attributes a personnel problem to a "personality clash" just may know exactly what he is talking about, according to management trainer Jerry Travers.



Drives a Cadillac, Mercedes or Jaguar sedan in conservative colors very fast with both hands on the wheel. He's impatient and talks to himself. Whether it's a corporation or a two-person office, he's likely to be the boss... or want to be.

Dresses in stylish, conservative clothes, conservative hairstyle, wears a wedding ring and an expensive watch.

Walks briskly, takes control wherever he goes, is goal-oriented and is well-prepared. His desk is cluttered but organized.

Wants power, prestige, money, opportunity for advancement, challenge, results, to find out why things happen, wide scope of operation, direct answers, freedom from controls, efficiency and varied activities.



Drives a Porsche or other sporty convertible very fast, usually with one finger on the wheel. Talks a lot and pays scant attention to the road. He's a politician, advertising director, or vice president of marketing.

Overdresses in the latest fashions with the brightest colors, has monogrammed shirts, fashionable hairstyle with lots of jewelry, but no wedding ring.

Struts with one hand in his pocket and one eye on his reflection in a mirror or window. He flirts, takes risks, is ostentatious and keeps his large, fancy desk very neat.

Wants popularity, money to cover his expensive lifestyle, public recognition, freedom of speech, group activities outside the job, democratic relationships, freedom from control and identification with the company. And the successful manager will know how to deal with a clash of personalities in such a way that he won't lose a valuable, skilled employee. That was the point of Travers' three-hour seminar on personality impact given to about 30 superintendents attending the Crowfoot Open at Grand Cypress Resort Aug. 6.

The seminar is one module of a large unit on stress that Travers has taught to major corporations around the world, including superintendents attending the 59th annual International Golf Course Conference and Show in Houston two years ago.

Healthy personalities break down into four basic types — Dominant, Inductive, Steady and Compliant — Travers said, "and none of them is any 'better' than any other. Ideally, you should have at least one of each on your team."

• **Dominant** personalities are aggressive, decisive, competitive, assertive, vigorous, resourceful, venturesome, opinionated, restless and direct.

• Inductive personalities are outgoing, gregarious, confident, enthusiastic, persuasive, neighborly, talkative, optimistic, charming and imaginative.

Dominators and inducers frequently go together. That is, persons who score highest on one of those two traits often score second-highest on the other. Together, persons with these two prevailing traits comprise about 30 percent of the American population.

"The dominant personality is the boss. He makes decisions easily," said Travers. Dominant persons start a lot of projects but rarely complete them themselves, choosing to delegate the "mopping up" to others. "They do make sure the projects get completed," Travers said, "they just get bored with details. They don't have particularly long attention spans. Arnold Palmer and Gen. George Patton are dominant personalities."

The inductive person is the ideal salesman who does great in a social setting, Travers said. Jacqueline Onassis and Rich Little are inductive personalities.

• **Steady** personalities are calm, sincere, deliberate, willing, conservative, amiable, dependable, dedicated, contented.

• Compliant personalities are cautious, respectful, thorough, tense, precise, sensitive, strict, serious, controlled, perfection-

(Continued on page 65)



Drives a 4x4 truck, station wagon or Toyota with one hand while eating with the other. Rarely gets tickets. He's a coordinator, middle-level manager or government employee.

Dresses casually and wears neckties only when absolutely necessary, hair is casual, frizzy and perhaps unruly, watch and wedding ring are unpretentious.

Slouches when he walks slowly with both hands in his pockets, gets along with everyone, is indecisive, dependable and likes structure. His inexpensive metal desk is somewhat messy.

Wants status quo, security, references, happy home life, historical procedures, sincerity, limited territory, constant appreciation, identification with the company, recognition for long service, special products and takes a long time to adjust to change.



Drives a mini-truck, Toyota, Volvo or Saab with both hands on the wheel and stops at all yellow signals.

Leisure dress is worn-out office attire, which tends to be very conservative and old-fashioned, probably purchased at a bargain store. Hair is very short or very long, carries a digital watch, wears a tie clasp, wedding ring and little other jewelry.

Takes short, precise steps or trots. Works methodically and is detail-oriented and demands structure. His practical desk is overorganized and can appear messy.

Wants standard operating procedure, limited exposure, security, sheltered environment, references, reassurance, personal attention, little responsibility and someone else to open the door for him on sales calls. Cannot tolerate sudden change.

They'll never get anything done...

In the workplace, the best personality combination generally is Steady-Inductive. In fact, Steadies are very productive with just about everybody, as the chart below — 1 is best and 8 is worst — shows. However their symbiotic relationship with Inductives is the only one to get "full marks." The Steady keeps the Inductive's creative juices focused on task while the Inductive constantly encourages the Steady to break out of his structured mold and seek new approaches.

The second-best combination is Steady-Dominant. The latter makes decisions easily and the former is happy to do the detail work when the Dominant goes charging off in search of new windmills. Dominants also work fairly well with Compliants.

On the other hand, Dominants do not work well together or with Inductives. The difficulties in the first relationship are rather obvious there can be only one boss — while those in the second are a little more subtle. The absolute worst working combination, however, is a pair of Inductives. "They have such a good time feeding off each other's creativity that they never get anything done," says Travers.

WORK ENVIRONMENT						
Combination	Dom	Induct	Steady	Comp		
Dominant	5	5	2	4		
Inductive		7	1	3		
Steady			3	3		
Compliant				3		

Jerry Travers has taught his seminar on personalities and stress to the world's major corporations. He conducted a session at the 59th annual Golf Course Conference and Show in Houston in 1988.

SOCIAL ENVIRONMENT						
Combination	Dom	Induct	Steady	Comp		
Dominant	4	3	6	8		
Inductive		1	4	8		
Steady			1	2		
Compliant				2		

Nothing beats this pair at playtime

For the very same reason that makes them unproductive workmates, two Inductives by themselves can make the world's biggest party... anytime, anywhere. Two Steadies also make an excellent social combination as do a pair of Compliants. The Steady-Compliant combination is nearly as good.

Dominants get along best in the social world with Inductives, who don't really care who's in charge so long as everybody is having a good time.

The Dominant-Steady combination, which works so well at the office, is a dud after hours.

The worst social combinations, however, are Compliants with either Inductives or Dominants. In the first case, one really gets caught up in the flow while the other can't help being distraced by the ripples on the current. The Dominant-Compliant clash often centers on the former's penchant for following his own whims and the latter's need for structure and predictability. If a pair of Inductives constitute a walking party, a Dominant-Compliant couple make up a moving war zone.



THE FLORIDA GREEN / FALL 1989

(Continued from page 63)

Compliance and steadiness can be companion traits — persons who score high in one often score second-highest on the other. Together, they comprise 70 percent of the American population, with compliant types outnumbering the steadies, Travers said.

istic.

The steady person is loyal, possessive, service-oriented, low-key and persistent. "He becomes an old friend and will stick with you to the end," Travers said.

The compliant person, above all, is a perfectionist, Travers said. He is thorough, organized, systematic and seldom caught off guard. "Jack Nicklaus is a perfect example of the compliant personality," he said.

Everybody has at least a little bit of each trait but one almost always prevails. Each person's mix will vary slightly, depending on whether he is in a business setting or a social one, but the principal characteristic (dominant, inductive, steady or compliant) should remain the same regardless of the situation. A person's perception of his own personality rarely matches exactly the personalities others see.

The key for managers is to learn the work habits and emotional needs associated with the various personality traits and assign tasks and responsibilities accordingly.

It also is especially helpful to know which personalities work well together and which ones clash. As the accompanying charts show, certain traits mesh differently, depending on whether the situation is task-oriented or social.

For instance, two inductive personalities make a great combination socially, but a terrible one at work. "They're so busy having a good time, feeding off each other's creativity that they'll never get anything done!" Travers said.

On the other hand, the inductive-steady

combination makes the best work combination, but only a fair matchup in social situations.

While everyday behavior can give the perceptive supervisor several clues to an employee's personality, those assessments should not be used for critical action unless they have been validated by tests, Travers said.

On the other hand, if a superintendent has two gregarious employees whose work generally is satisfactory except when they're assigned to work together, he might be wise to split them up: they could be inductive personality types having too good a time.

All seminar students completed a personality profile test to learn their own traits. Superintendents who wish to have themselves and their employees profiled can contact Travers at 5438 Ralston Court, Atlanta, GA 30338; phone 404-394-2331.

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P.O. Box 1912 Tifton, GA 31794 Ga.-Grown & Certified Sprigs & Sod Max Brown followed up on Robert Trent Jones's 'crazy' idea to apply fertilizer through the irrigation system

It's a crazy idea... and it worked!

BY LARRY KIEFFER

POMPANO BEACH — Max Brown, Ph.D., knew he had a winner very shortly after he opened a business that launched an industry.

"I'm a very analytical person," says Brown, who founded Liquid Ag Systems Inc. nearly 16 years ago. "But once I see the numbers, I'm easy to convince."

The "numbers" that convinced Brown his business had a good chance of success were the results of a study which showed that liquid fertilizer could be applied to turfgrass through an irrigation system at least as uniformly as granular fertilizer could be applied by mechanical spreaders.

"That was my big doubt," says Brown. "I knew there were some solid advantages to using liquid fertilizer — that's why I started the business — but I was worried about uniformity. I was sure we would get some patterns — big circles of green surrounded by undernourished turf — but the opposite turned out to be true.

"The frequent, light applications of liquid fertilizer minimize the effect of sprinkler patterns and turn out to be at least as uniform as dry fertilizer applied by a broadcast spreader, which is what most golf courses used at the time."

Although the uniformity study was completed in May, 1973, only two months after Brown had hung out Liquid Ag's shingle, it would be another four years before the agronomist-turned-turfgrass consultant could put himself on the payroll.

"We started very modestly," he said.

Brown got the idea for his business while working as a staff agronomist for golf course architect Robert Trent Jones.



Dr. Max Brown, founder of Liquid Ag

What's the big deal, anyway?

What are the advantages to using liquid fertilizer, or "fertigation" as it's called ?

"The plant can't tell and doesn't care what form it gets its nutrition in, but there *are* several advantages," Brown said.

Robert Trent Jones originally investigated the process for two reasons:

- · Eliminate fertilizer burn.
- Avoid closing course to apply fertilizer, since fertigation is done at night.
- Brown's customers have given him some more:
- Control it allows the manager to be completely in control of his nutrition program rather than putting

it in the hands of a technician.

- Greater efficiency frequent light applications minimize loss from leaching or washout and also provide a steady supply of nutrition, eliminating the cycles of growth and starvation.
- Application cost is less. Once equipment is paid for (payback is less than a year and it lasts for at least 10), there is no application cost.
- Materials cost less frequent light applications of liquid fertilizer give all the advantages of "timed release" dry formulations at a fraction of the cost.



Liquid Ag's 7,000-square-foot plant in Pompano Beach is now one of three facilities the company operates in Florida

DANIEL ZELAZEK

"The Jones organization owned an irrigation company and Mr. Jones was always looking for new possibilities," Brown recalls. "He asked me to look into the feasibility of applying fertilizer with the water in the sprinkler system.

"We looked at it and talked to engineers and other people that had been doing some of it and found that, under certain controlled conditions, it might be possible to fertilize golf courses through the irrigation system, especially in Florida where irrigation is used extensively."

Jones didn't pursue the idea but Brown, who had grown weary after eight years of trotting the globe for the indomitable architect, became a golf course turf consultant and devoted his spare time to working on the "fertigation" concept.

"It's interesting now, looking back,"

Brown says. "We talked to some of the big names in the turf industry - the people who wrote the textbooks and other wellknown professors.

"Most of them said, 'Well, it's an interesting concept but it's not a very good idea and it probably won't work.'

"People in the golf industry said the same thing."

But Brown wouldn't let go of the idea.

Perhaps he picked up his tenacity from Dr. Gene Nutter, who had recruited Brown off the campus of Iowa State University for a University of Florida research assistantship.

"I would hate to be any person standing between Dr. Nutter and a goal he has set," Brown relates.

Ironically, although he worked with Nutter on some projects over the years,

- Current VP remembers when he was the only employee in the plant68
- Company has model containment program71

Brown never took a class from him.

"When I arrived, I learned he had left to start the superintendent training program at Lake City Community College," Brown recalls, "so I ended up getting assigned to some new fella' named Horn."

The "new fella'," of course, was the late Dr. Granville C. "Granny" Horn, (Continued on page 70)

Firm's vice president recalls the 'good old days' when he was the only employee at the plant

He never knew why I had such a smile on my face!

BY GEORGE JONES & CHARLOTTE JONES POMPANO BEACH - Ben Pittman, vice president of operations at Liquid Ag, was the third person hired by the new company. He started as the truck driver.

"Back in 1974, Ed Darlington (a former colleague of founder Dr. Max Brown and the firm's first employee) hired me. We were a small company.

"Max was busy doing a lot of consulting at that time and was not around very much. It was primarily Ed and myself. Sally, Max's wife, came in three times a week and did all the office work. We also had Howard, a retired bookkeeper accountant who worked half a day on the days Sally wasn't there.

"Business was real slow. But we needed a telephone answering service because there would be times

when Ed would be out in the field and I would be making deliveries.

"Sometimes I'd be the only person there. I'd have to load the trucks, unload products coming in, batch and load outgoing product. When I had everything ready to make a delivery, I'd just lock up and the answering service would take over.

"I remember one time a customer asked for his order 'today.' So I hung up the phone, batched all the material, loaded the truck, typed up the paperwork, then I washed up, got in the truck and went straight out to the customer.

"When I got there, he said, 'The guy I talked with on the phone said that he could get it out here pretty soon, but I didn't know it would be this fast!'

"The customer never knew why I had such a friendly smile on my face."

In his first two years, Pittman eventually learned all the procedures at the plant, leaving Darlington free to spend all his time out in the field.



Ben Pittman, Liquid Ag's vice president of operations

"The biggest problem we had in the early days was finding equipment that would be compatible with the fertilizers we made. The polypropelene we use today wasn't available in 1975. Our first systems were made from PVC and we had to use cast iron pumps.

"A lot of people laughed at us back then, but we knew we had a better way to get fertilizer to the plant so we just kept on going."

Liquid Ag depended on nursery business at first, but a small public course across the street from the firm's tiny plant welcomed the company to experiment in exchange for the fertilizer.

"Our first big successful golf application was Inverrary CC in Fort Lauderdale. We did a lot of research work out there and put in systems on each of the golf courses that are still

operating.

"This was all so new to everyone. What we were guaranteeing was hard even for the fertilizer administrators to strive for.

"At first we offered relatively simple mixes but now we can develop any type of liquid fertilizer. In the early days, we could not put phosphorus in the irrigation water but now we have injection systems that can handle it. And we can put out whatever levels of micronutrients are needed.

"We have grown very fast, but I think appreciating our customers has contributed the most to that growth. In the beginning, we had such a new concept that it was necessary to spend a lot of time with the customers - if a customer had a problem, we were there to help, regardless of the time.

"Max still makes a point to tell us to spend enough time with our customers, just as we did back then. Although we are established now, we must always stay conscious of our product quality and the quality of our service."



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(From page 67)

who led the UF's golf turf program into a period of national prominence.

So Brown decided to apply the analytical skills he honed under the legendary Horn to the idea spawned by Jones, one of the most creative men in golf.

Technically, he knew "fertigation" was feasible and he knew the process had two major advantages over dry fertilizer:

• No possibility of fertilizer burn.

• No need to close the course for fertilization, since it's applied at night.

So in March, 1973, Brown took the plunge.

He leased a 1600-square-foot building on a quarter of an acre in southwestern Broward County and hired a former student, who had helped investigate the concept for the Jones organization, as general manager, technician and custodian. Brown's wife, Sally, kept the books three days a week.

"I want to make it clear that we didn't invent this process," Brown says. "Other companies were selling liquid fertilizer and the equipment to apply it. But we were the first to base our business on the concept of fertilizing turf through the irrigation system."

From those early beginnings, Liquid Ag Systems Inc. has grown to 25 employees working in facilities in Pompano Beach, Fort Myers and Tampa.

The Pompano Beach plant was moved to a bigger site — 7,000 square feet on two acres — two years after Liquid Ag was born.

"We needed to be on a rail siding and of course the building was nowhere near big enough," Brown said. The Fort Myers plant, which has 11,000 square feet of production and office space, opened in 1984. The Tampa facility, which has no administrative offices, opened in 1987.

The fledgling company had only two technological problems to overcome, Brown says, one mechanical and one chemical.

"It was very hard to work out the chemistry for some of the micronutrients, particularly iron and manganese," he said. "Getting them into a clear liquid form was not easy."

The Iowa native says he cannot remember how many glass jars were filled with sample formulations before they solved the problem.

"Until we got it right, they all had reddish-brown sediment at the bottom within a couple of hours after we filled them," he said. No superintendent is going to water his turf with a liquid that will stain the sand in his bunkers.

Solving the manganese problem paid an unexpected dividend a few years after the

