

## Florida fuel tanks must be insured

BY SCOTT BELL

On January 1, 1995, all above ground fuel storage tanks were required to be insured. If you have above ground fuel storage tanks that hold over 550 gallons of fuel, then you are required to carry restoration insurance and third party liability coverage.

Restoration insurance will cover the costs (after a deductible) for clean up from a fuel spill. Those costs can include soil and water remediation, reporting and testing. The third-party liability covers you in the event that the contamination leaves your property and affects your neighbor's property.

The limits needed for tanks of 250,000 gallons or less are \$1 million per incident and \$2 million annual aggregate for facility clean up and third party liability coverage. With all of the remediation, testing and reporting, restoration costs can easily exceed \$100,000.

The law allows for a facility to self insure itself if it can meet certain criteria explained in 17-769.5000 FAC. A facility can purchase insurance from a private insurance company, or they can participate in the Florida Petroleum Liability and Restoration Insurance Program (FPLRIP). Information can be obtained by calling:

**FPLRIP 1-800-475-4055**  
**PLUS 1-800-866-4758**  
**another insurance program**

For more information, call the FL DEP at 904-488-0876. It should be noted that if you have below ground storage tanks, they should have already been insured, and if they are not, they should be insured as soon as possible.

## LPGA Sprint Championship

*from Page 89*

made the operation possible: (1) Loaner equipment in the form of three walk mowers, a fairway mower, a Jake 3810 and a bunker rake, (2) They didn't have to mow the roughs after the first day of the week, and (3) Super volunteer, former superintendent, Gary Morgan who showed up every day to help drag fairways and rake bunkers.

Mark would like to acknowledge the training and experience he got by understudying Tom Alex at Grand Cypress. Mark said, "I set my benchmarks for excellence based on what I learned from Tom. I saw and learned what a golf course could be. Why would anyone strive for anything less? It is the model I use to compare results here at LPGA International."

With a clubhouse, resort, and homes to be built, Mark and company have a lot of work ahead. But for now, congratulations on an outstanding debut!

*Joel D. Jackson, CGCS*  
 Disney's Magnolia G.C.

# ELIMINATE HOT SPOTS

BEFORE                      AFTER

## envirogenesis™

# TurfBloom

**TurfBloom** creates a membrane barrier at the soil surface that inhibits water evaporation.

**TurfBloom** is ideal for areas with limited water supply or poor irrigation coverage.

**TurfBloom** is not a polymer and has no negative impact on soil.

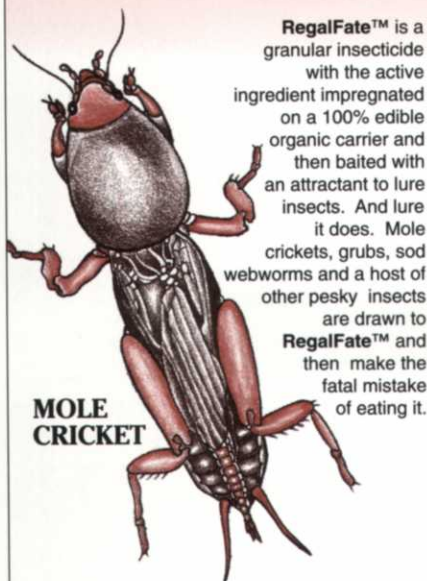
**Reduce Water Usage with  
One Annual Treatment!**

**Call Envirogenesis to place your order today:**  
**1-800-814-1324**

Envirogenesis, Inc. • 5712-K General Washington Drive • Alexandria, VA 22312  
 703-941-3900 • FAX 703-941-1508

# RegalFate™

## THE FATAL ATTRACTION FOR INSECTS!



MOLE CRICKET

RegalFate™ is a granular insecticide with the active ingredient impregnated on a 100% edible organic carrier and then baited with an attractant to lure insects. And lure it does. Mole crickets, grubs, sod webworms and a host of other pesky insects are drawn to RegalFate™ and then make the fatal mistake of eating it.



SOD WEBWORM

RegalFate™ is many times more effective because the insect ingests it. Control by contact or vapor action is only partially as effective as the ingested toxicant. Spread the dry granular RegalFate™ for superior results.



Regal Chemical Company

P.O. BOX 900 / ALPHARETTA, GA 30239

PHONE 404-475-4837 / 800-621-5208

# Will Research Dollars Become (Ex)Spendable?

BY SCOTT BELL

The state university system has been decimated by budget cutting and allocation realignment. While funding for prisons has risen from 2% of the state funding budget to 8%, the education funding has dropped from 12.5% in 1985 to 7.5% in 1995. Unfortunately, enrollment in both state universities and prisons has increased. In 1985, 60% of the education system funding came from state sales tax. Presently, 49% of the funding is coming from sales tax.

At the University of Florida in Gainesville, 29% of the funding comes from taxes and the lottery, while 71% comes from tuition, various funds, endowments, etc. University of Florida research funding only takes 22.5% of its funding from taxes and the lottery. IFAS relies on state funding for 56% of its \$163 million budget, and the research section relies on the state for 64% of its funding.

What does this have to do with golf course superintendents?

The state legislature has asked for a 25% savings in operating costs to give the money back for allocation to other areas. This request comes after a 1992 reduction in operating costs of 15%. Obviously the quality of the education would be the last thing that the legislature will want to cut since Florida students already rank below national averages in many standardized tests.

The main part of the budget cutting would happen in the university areas and particularly in research. While the universities can raise tuitions to make up shortfalls, and since they are less dependent on tax dollars than IFAS, the universities could survive this, although I'm sure that the quality of education would drop, and nobody wants that.

IFAS, on the other hand, could be severely hurt by a 25% budget cut. Anyone who has worked on the research committee or with the research green can tell you that IFAS is not rolling in money. IFAS has turned out internationally-known research in turf and ornamentals as well as in other areas such as agriculture, industry and business.

While all of this research has been generated, the IFAS operating costs have remained the same since 1980 and the faculty growth (number of positions) has remained the same. Close to home, the FGCSA has our research green at an IFAS facility and close friends like Elliott, Cisar, Giblin-Davis, Snyder and Busey all work at South Florida IFAS facilities. Our industry

has greatly benefited and will continue to benefit from the work done at the IFAS facilities.

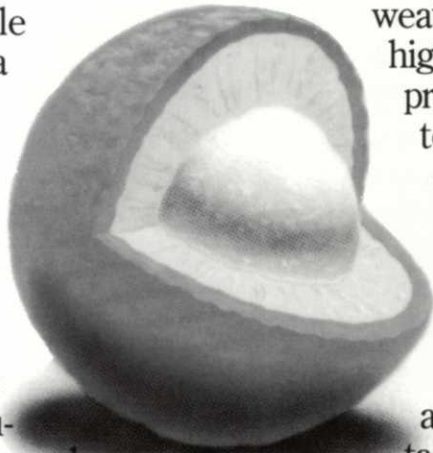
What can you do? Write to your state senators and representatives, who are listed in the beginning of the white pages in all phone books. Let them know that agribusinesses needs research to be done **in our state**. Let them know that you benefit from Florida research.

Anyone who has worked on the research committee or with the research green can tell you that IFAS is not rolling in money.

Write to your state senators and representatives... Let them know that you benefit from Florida research.

# The Poly-S™ difference: a unique multiple coating system.

Each Poly-S™ particle is manufactured using a computer-controlled, two-tier coating process that allows nutrients to be released steadily and safely by controlled diffusion through the polymer coating. Thus the rate of release can be regulated over a pre-programmed period of time over a wide variety of



weather conditions — providing higher nitrogen analysis than SCU products with less sensitivity to temperature than fertilizers coated with polymer only.

It is the most efficient — and cost-effective — turf fertilizer technology ever developed. For more information about Poly-S fertilizers and their performance advantages, contact your Scott Tech Rep. Or call 1-800-543-0006.



## Your Sand Man

Choker Sand • Greens Mix Sand • Pea Rock

White Trap Sand • Dolomite • Hi-Cal

Dry Sterilized Top Dressing Sand

**All Sands meet U.S.G.A. Specs**

**E. R. JAHNA INDUSTRIES, Inc.**

Lake Wales, FL 33859-0840 • (813) 676-9431

## Trying to make intelligent decisions

### Mark My Words



*Mark Jarrell*

Mark Jarrell, CGCS  
Assistant Editor

At the Poa Annua board meeting, the FGCSA finally voted to approve funding for the DNA research proposal initially presented by IFAS last fall. This is a two-year, cutting-edge research project whose \$66,000 price tag will be jointly split between the FGCSA and the Florida Turfgrass Association.

My use of the word “finally” in no way implied that we’ve been dragging our feet on the matter, as some might conclude, but rather, suggests that a lot of deep thought and analysis by many busy people went into the decision to fund this project. Members of both FGCSA and FTGA should find comfort in the deep sense of fiscal responsibility and concern for our industry demonstrated by all those involved in this project from conception to initiation.

For those of you unfamiliar with this proposal and its attendant concerns and controversy, I’ll do my best to summarize:

I think we all would agree that one of the Florida golf and turf industry’s greatest problems is the lack of standards and quality controls in the sod and grassing business. All of us are painfully aware that specifying “Tifdwarf” or “Tifton 419” in a grassing contract is wasted ink, and visiting a field is wasted time.

The best quality control measures currently available are word of mouth and the individual integrity of the grassing contractors and sod producers.

Golf courses often spend millions of dollars during construction or renovation only to be disappointed with the quality and/or consistency of the turfgrass installed on their property. Even if initially satisfied, decline in quality and consistency due to the appearance of off-types is inevitable as time passes.

At this point in time, speculations about the origin of off-types are offered but conclusions are impossible, and answering this question is one of the main objectives of this project. Superintendents have been fired, grassing contractors have been sued, and fingers have been pointed in every direction seeking to assign blame and accountability for a problem that is truly a failing of our entire industry.

Though the problem has been with us for many years, a totally satisfactory solution could not be achieved using the standard morphological methods of identification and chromosome counts.

As Dr. Phil Busey puts it, “A deficiency or morphology is that the number of useful traits is few, while the number of possible variants is potentially large. It is difficult for morphology to represent the adaptive genetic diversity of bermudagrass, and to distinguish closely related genotypes. Small genetic differences can produce large morphological effects.”

In this project, morphology will be used as a preselection process to increase the chance of off-type detection and reduce the cost. Likewise with chromosome counts — costly DNA testing is unnecessary if you can screen out a selection based on chromosome numbers.

The intelligent and appropriate use of all these identification techniques will help build our necessary database, keep costs reasonable, allow for practical certification inspections, and give us the best chance of developing a reliable and repeatable positive identification procedure.

Notice that I said “give us the best chance” in the previous paragraph. Everyone needs to understand that there is a possibility, as there would be with any endeavor using new technology, that the project will not yield the results we are expecting.

Obviously, we think the risk worth taking, or we wouldn’t be putting up \$66,000. There is also the chance that everything works fine, but the conclusion reached is that off-types are caused by spontaneous mutations, in which case no practical solution for our problem is feasible, but at least we’ll know that and the finger pointing can stop.

Earlier in this article I used the word “controversy,” and the real controversy surrounding this project is the DNA technology. Some of the brightest minds within the field disagree on the best methods and techniques, so how can golf course superintendents make an intelligent decision?

Making our decision a little easier is

# Reduce Watering.

the fact that our recently instituted certification program needs Florida data and validation, since it will be administered and conducted within the state of Florida. We will still utilize out-of-state expertise, such as Dr. David Huff of Penn State, author of most of the papers published on RAPD markers in turfgrasses, to help us achieve the desired results.

The two DNA technologies at the heart of the controversy are DNA Amplification Fingerprinting (DAF), currently utilized at the University of Tennessee, and Random Amplified Polymorphic DNA (RAPD), which is the method proposed by the University of Florida for this project.

Drs. Phil Busey, Al Dudeck, Charlie Guy, Terril Nell, and Nigel Harrison at the University of Florida, and Dr. David Huff at Penn State, feel the RAPDs technology offers the best chance of developing an efficient method of genetic fingerprinting bermudagrass cultivars.

RAPDs is cheaper and faster than other methods, doesn't use radioactive labeling, and works with easily extractable, small amounts of crude DNA. Up to 100 primers will be tested, giving a high degree of confidence in the results. The main concern with the RAPDs method, readily transferable results from one lab to another, will be addressed by replicating selected results between the two labs in Fort Lauderdale and Gainesville.

We are taking a giant step into the future for our industry. Fear of failure should be our last concern. Turfgrass certification needs the backbone this project can provide.

Kevin Downing, David Barnes, Mike Bailey, Paul Crawford, Jeff Hayden, the professors at the University of Florida, and many others, have worked long and hard to bring this project this far along, and it assumed that this two-year proposal is but the first step in a long, multi-year process. Results won't come quickly, and practical application even slower.

Of course, we could just hire a genetic engineer to develop a "bentudagrass," and forget all about these bermudagrasses and their problems, couldn't we?

Even if it doesn't rain, you'll reduce your turf's overall watering requirements and take care of those dry spot problems with **Hydretain**™ 77.

This unique liquid contains both the hygroscopic and humectant components needed to absorb and store moisture on plant roots and on soil particle surfaces. **Hydretain** penetrates the soil, and acts like a water magnet, holding moisture and keeping it available to your turf.

In addition to the benefits derived from a reduced watering schedule, you'll also see:

- Enhanced nutrient and pesticide efficiency
- Improved seed germination
- Elimination of trouble spots
- Reduced fungus, algae and disease problems
- Improved transplant establishment
- Reduced labor and watering costs

**For more information about Hydretain, contact your local Terra retailer or call:**

Terra Asgrow Florida  
4144 Paul Buchman Highway  
Plant City, FL 33565  
(813) 752-1177



Available from your nearest Terra location.



## Changes in Latitudes, Changes in Attitudes

### Green Side Up



*Joel D. Jackson*

Joel D. Jackson, CGCS  
Editor

Can you say globalization? Latitudes and longitudes shrink at the click of a computer mouse. I'm sitting in my home/office making hotel and airline reservations on my personal computer. I subscribe to America Online and I'm just a nanosecond away from webbing on the internet. I haven't even scratched the surface of the information highway that passes through my spare bedroom.

All that information won't necessarily help me groom a golf course better than someone who hasn't evolved into the computer age, but maybe I have a better feeling for what is driving the rapid cultural revolution in the global business world.

Streamlining, flattening, downsizing, out-sourcing, empowerment, accountability, performance development plans and leadership pathways are the buzzwords and passwords in the competitive marketplace of today. This is especially true for all corporate golf operations, and remember all you private clubs it is the world of many of your members.

We recognize that the role of the superintendent has changed over the past decade, and I'm here to tell you the pace of change is accelerating. It is not enough to be technically proficient in managing turf. In fact the word "manage" may be on an evolutionary dead end branch of the business tree.

We are increasingly called upon to be facilitators, coaches, leaders and communicators. Issues of loss prevention, environmental integrity, social awareness in areas of ADA, OSHA, and diversity propel us helter-skelter through a litigious society.

Amid all the clamor of rapid change and competition remains the demand

and expectation for the best possible playing conditions on the golf course.

And guess what? Mother nature doesn't care about nanoseconds, microchips and organizational initiatives! Spring will come when its good and ready, and maybe when your not! Turfgrass will recover and flourish when the conditions are ripe for growth. Not because we will it, but because the sunshine, water, soil temperatures and nutrients are present in the correct amounts at the appointed time.

What can be changed is how we deal with people internal and external to our operations. Breaking down old barriers and finding new ways to partner and cooperate for the success of the whole entity not just maintenance.

It will take hard work and soul searching to identify, measure, and solve old problems. Traditional mindsets will be assaulted and people will be moved out of comfort zones into the tumult of the competition for survival, personal and organizational.

Forces at work in this high-tech, fast paced world don't always realize that their meteoric flights are adjusted to the natural rhythms of the planet. It is the nature of man to explore the possibilities and we cannot remain immune to trying new things.

We are being asked to change old attitudes. However, those pursuing the cultural revolution must remember that nature can "cop an attitude" of its own and will have the final say and dictate a certain success rate based on its own terms.

Mankind is often reminded that nature must be respected and dealt with in all human endeavors.

Can you say NASA space shuttle and woodpecker?

# BUILT TO LAST

DEPENDABILITY IS THE  
CORNERSTONE OF OUR BUSINESS!



## QUALITY. PERMANENCE. TIMELESSNESS.

THE NUCRANE FAMILY IS GRATEFUL TO REPRESENT JOHN DEERE AND OTHER FINE QUALITY PRODUCTS IN FLORIDA AND THE DESERT SOUTHWEST.

OUR SERVICE AND SUPPORT HAS EARNED US A LOYAL FOLLOWING OF THE BEST CUSTOMERS IN THE INDUSTRY.

CALL US. WE'LL BE THERE FOR YOU.

2020 SEABIRD WAY  
RIVIERA BEACH, FL 33404  
(407) 842-0440

---

417 CENTRAL PARK DR.  
SANFORD, FL 32771  
(407) 323-9555

---

11820 LACY LANE  
FT. MYERS, FL 33912  
(813) 275-4441

---

72104 CORPORATE WAY  
THOUSAND PALMS, CA 92276  
(619) 343-0270

---

3137 WEST POST RD.  
LAS VEGAS, NV 89118  
(702) 263-4512



  
**NUCRANE MACHINERY**