

BENHAM'S BEAT

Lack of funds leaves research on the table

The FTGA and the University of Florida along with many members of the FGCSA are working together to make the new research facilities at Pine Acres Plant Science and Education Unit a reality.

Together we are formulating a plan to involve industry companies in helping with the building of the site and showcasing their individual equipment in use at the research facility.

For example, irrigation using the latest technology not only will serve Pine Acres research plots but also as a teaching aid for students. Golf course superintendents will be able to bring their green chairman or directors to look at several irrigation systems at once on a fairway or green.

They will be able to observe different types of mowing equipment on fairways and greens with a variety of grasses cut at the same height compared to another fairway or green at different heights of cut on several different grasses. The ability to use the research at the Envirotron on large turf plots and actual fairways, tees and greens is a wonderful concept. I will keep you updated of our progress in future articles.

Speaking of research, Bobby Ellis and Brian Combs with their committee have completed their recommendations on research and scholarship awards. Their committee works very hard on selecting the grants.

All proposals received are evaluated on a scientific educational merit scale. The quality of proposals is so high and our funding ability is so limited that each year we leave a lot of quality research on the table.

In addition, we are getting requests from our industry for more research on water usage, evaporation losses and determining the percentage of irrigated water being returned to the aquifer for reuse.

We hope the \$5-a-member program, Golfers For A Better Environment, which enables golfers to support turfgrass

research will continue to improve to provide funds for necessary research. In the winter issue of the *Florida Green* I will go into full detail of how that program is needed and funded.

You generally get many chances to read what projects are funded each year in the *Turf Digest* and *Florida Green*. I thought you might like to see a list of research projects that made it through the difficult evaluation process but were not funded because of the lack of funds.



Donald Benham

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Current Status of Approved Research Projects

2001 FLORIDA TURFGRASS PROPOSALS APPROVED BUT NOT FUNDED

Shows the project title, researcher(s), requested amount, and scientific educational merit score on a scale of 1-4, with 4 being high.

- Spread of mole cricket killing wasp *Larra bicolor* in Northern Florida, J. Howard Frank, \$8,597, 3.0
- Plant-Parasitic Nematodes of Seashore Paspalum, William T. Crow, \$17,350 (8,675 1st yr/8,675 2nd yr), 3.3
- Evaluating Best Management Practices for Landscape Turfgrass, Laurie Trenholm, J. Bryan Unruh, \$9,545, 3.1
- Weed Management Systems for Seashore Paspalum, Barry Brecke, J. Bryan Unruh, \$13,800 (6,900 1st yr/6,900 2nd yr), 3.0
- Variation in Product performance for the control of different Mole Cricket Populations in the Southern USA,

Eileen Buss J. Bryan Unruh Rick Brandenburg, \$21,620 (10,810 1st yr/10,810 2nd yr), 3.3

- Impact of Fipronil, Bifenthrin and Acephate on Beneficial Invertebrate and pest Insect Activity in bermuda grass, Eileen Buss, \$22,540 (11,270 1st yr/11,270 2nd yr), 3.4
- Controlling Sod Worms and Chinch Bugs on Florida Lawns, Eileen Buss, \$5,635, 2.9
- High Nitrogen Containing Organic Compounds for use in controlling Plant Parasitic Nematodes, J. Bryan Unruh Robert Kinloch, \$12,650 (8,625 1st yr/4,025 2nd yr), 3.3
- Enhancement of P Retention in Sand Golf Greens & Fairways, J.B. Sartain, \$74,294 (\$24,242 1st/ 24,760 2nd yr/\$25,292 3rd yr), 3.0
- Influence of Soil and Micronutrient availability on the fungal pathogen *Gaeumannomyces graminis var. graminis* in Turfgrass, Carol M. Stiles, Lawrence Datnoff, Monica Elliot, George Snyder, \$25,875 (14,375 1st yr/\$4,600 2nd yr/\$4,600 3rd yr/\$2,300 for 1/2 of 4th yr), 3.0
- Development of Proactive Strategies for Environmentally Sound & cost effective Nitrogen Fertilization of Turfgrass, J.M. Scholbert L.E. Trenholm, \$16,675 (\$8,625 for 1st yr/\$8,050 for 2nd yr), 3.8
- Nonherbicide management of dollar weed in the landscape, Phillip Busey, \$11,500 (\$5,750 1st yr/\$5,750 for 2nd yr), 2.7
- Development of real time nutrient sensor for Turfgrass fertility management in golf courses, Wonsuk Lee, Tom Burks, Grady Miller, Rao Mylavarapu, John K. Schueller, \$87,170 (\$42,320 1st yr/\$28,750 2nd yr/\$16,100 3rd yr), 3.3
- Effect of organic Matter in Soil of Insecticides for Southern Chinch Bug Control, Ron Cherry, Russell Nagata, \$5,750, 2.7
- Thermal Tolerances of Ornamental Perennial Crops, Kimberley Moore, \$11,500 (\$5,750 1st yr/\$5,750 2nd yr), 2.4

NEW PROJECTS FUNDED BY FTGA IN 2001

- Comparative Pathogenicity of

- Several Plant-Parasitic Nematodes to Turfgrasses, William Crow, two-year study, \$9,200.
- Documenting the Florida Yard Concept for Reducing Nutrient Runoff and Leaching, John Cisar and George Snyder, one-year study, \$11,500.00
- Breeding Bermuda Grasses for Florida, Brian Scully, John Cisar, Laurie Trenholm, J. Bryan Unruh and Kenneth Quesenberry, one-year study, \$20,000
- Enhancement of Water Use Efficiency in Sand Soil in Golf Greens and Fairways, J. B. Sartain, Grady Miller & T. W. Shaddox, 3 year study - \$15,124 (1/2 funded by FTGA General Fund 1/2 funded by Envirotron Fund)

Total 2001 New Projects FTGA funding is \$41,010.50

CONTINUING PROJECTS FUNDED BY THE FTGA

- Bahiagrass Improvement for Rough Turf Application, Ann Blount and Kenneth Quesenberry, second year \$9,775, 2002 3rd year, \$6,325
- Seashore Paspalum Management in Florida, Laurie Trenholm, second year \$2,875.00
- Influence of silicon on controlling grey leaf spot of St. Augustinegrass, Lawrence Datnoff, Russell Nagata, and George Snyder, second year \$950.00
- Fate of N During Grow-In of a Golf Course Fairway Under Different N Management Practices and Intensities, J. B. Sartain and Jason Kruse, second year \$15,640.00
- Second Year Study for 2001 The Role of Gypsum for Maintaining Turfgrass on Sand Soils, George Snyder and John L. Cisar, \$13,800.00

Continuing 2001 research funding from the FTGA is \$43,040.00

Overall total for turf research funding from the FTGA for 2001 is \$84,050.50

CONTINUED FUNDING FROM FLORIDA SOD COOPERATIVE

- Optimizing herbicide combinations for managing mixed weed populations, Philip Busey, second year \$5,000

- Tropical Signalgrass Management in St. Augustinegrass Sod, Barry Brecke, J. Bryan Unruh, Philip Busey, R. Charudattan, Carol Stiles, Laurie Trenholm, Grady Miller and Jan Weinbrecht, second year \$10,000

Total continuing project funding from the Florida Sod Coop is \$15,000.00

CONTINUED FUNDING FROM SEVEN RIVERS CHAPTER (ENVIROTRON FUND)

- Diagnosis and Control of *Pythium* diseases of turf in Florida, Carol Stiles, Lawrence Datnoff and Grady Miller, second year \$2,410.00, 2002 third year, \$1,150.00
- Enhancement of Water Use Efficiency in Sand Soils used in Golf Greens and Fairways, J. B. Sartain, Grady Miller & T. W. Shaddox, first year \$4,910.50, second year \$5,040, third year \$5,173.50 (50% of project total)
- The Effects of Light Intensity on Turfgrass", Laurie Trenholm, third year \$24,000

Total funding for 2001 from the Envirotron fund is - \$31,320.50

GCSAA Seminar

Golf course superintendents got their education off to an early start by attending a GCSAA Superintendent Leadership seminar on Monday morning.



FGCSA President Geoff Coggan, left, poses with former GCSAA President Bruce Williams, who presented the half-day seminar on Mastering Your Communication Skills. The Leadership series is being sponsored by a \$250,000 grant from Callaway Golf. Photo by Joel Jackson.

Ribbon Cutting

Newly elected FTGA Officers officially open the 49th Annual FTGA Conference and Show in Gainesville.



From left: Bobby Ellis, secretary/treasurer; Alan Puckett, president and Ray Caruthers, vice president. Photo by Paul Bundschu.

GCSAA Educators



From left: FTGA's Don Benham meets with GCSAA's Chapter Seminar Manager Shari Koehler and Director of Education Hannes Combest and UF's Dr. Terril Nell to discuss how GCSAA might partner with the FTGA to provide more credit-earning educational opportunities for conference attendees. Photo by Joel Jackson.

FGCSA Booth



FGCSA Association Manager Marie Roberts (seated) chats with Scott Zakany while Buddy Carmouche takes the Caddy Shack Trivia Test at the FGCSA Booth during the FTGA Trade Show. UF turf science major Jim Spratt had a perfect score to win the contest and the mini-golf bag cooler prize. Photo by Joel Jackson.

USGA GREEN SECTION

When It Rains It Pours: From Famine to Feast

By John Foy and Todd Lowe

Heavy rains and irrigation restrictions are still the primary issues with Florida golf course managers.

The weather, and especially rainfall for Florida, has been extreme for some time. Last year ended with a 20-25 inch rainfall deficit for most of the state. Throughout the winter and spring, severe drought conditions plagued the state, and because of a critical water shortage, the water management districts imposed irrigation restrictions. The Phase II restrictions, which allow irrigation of fairways and roughs two times per week, have complicated course management, but to my knowledge major turf loss has not been experienced.

In July, typical summertime thunderstorms began to occur. By the end of the month, total rainfall for Palm Beach County ended up being the second highest recorded in the past 50 years. This was followed in early August by a tropical wave that dumped as much as 13 inches in some locations and caused localized flooding. With all of the rain, wells and reservoirs have been replenished and the water level in Lake Okeechobee has risen more than two feet. However, the lake is still two feet below average for this time of year.

As expected, the excessive rains and heavily overcast skies have resulted in declining bermudagrass health and quality, especially on putting greens. With almost every one of the SOS calls we have received, a very low height of cut is being maintained due to demands for fast putting speeds. Remember: when sunlight intensity is reduced during the rainy season, raising the height of cut is a necessary compromise to assure bermudagrass survival.

Superintendents are starting to think about the upcoming winter season.

Overseeding is a primary component of fall preparations, but with the South Florida Water Management District announcement that irrigation restrictions will not be lifted, overseeding plans should be reconsidered. Establishment and maintenance of overseeding is not feasible if fairway and rough irrigation is permitted only two days per week.

There are no plans to lift the restrictions on nonessential water use, and imposing some type of permanent watering limits for the next two decades is being considered. This coincides with completing the Everglades Restoration Project and expanding the region's wells and reservoirs. If there is not a reversal in this situation, golfers in South Florida can be provided with good playing conditions, but a lot of courses will not be as green.

TODD LOWE ALSO CHIPS IN FROM HIS TRAVELS

When it comes to water, Florida has been a state of extremes. We have gone from suffering severe drought to being inundated with rain since mid-June. Heavy rains soaked much of Florida during the week ending July 17, further easing long-term drought across the state. Only a small area of extreme drought lingers across interior central Florida. During the first 17 days of July, rainfall in Orlando included 9.28 inches (225 percent of normal).

The average surface elevation of Lake Okeechobee rose to 9.66 feet on July 17. This is up from 9.23 feet on July 10 and a record-low level of 8.97 feet on May 23. Lake Okeechobee is a key hydrological feature in the state of Florida as it supplies many of the surficial aquifers for our golf courses. It is still below the level that it needs to be and is being retrofitted with technology to backfill the reservoir.

Some experts are now calling for a mild El Niño throughout the region, so a more "normal" rainfall amount should continue through the summer. This is welcome news for many golf courses through-

out the state that have previously suffered from the drought. However, many courses have already received more than they can handle.

Increased rainfall can make it difficult to perform routine golf course maintenance practices. Fairway mowing is especially difficult on rain-soaked turf and some courses can fall behind. In addition to being overly wet, the turf becomes very thick and more difficult to mow and appears scalped when mowers are eventually allowed on the turf. A good tool throughout Florida during the rainy season is the use of plant growth regulators. PGRs like trinexapac-ethyl (Primo) reduce the vertical growth of turf, thereby decreasing mowing frequency. On bermudagrass fairways, PGRs also decrease clumps of clippings left behind from mowing.

Reduced rates of PGRs are also helpful for improving playing conditions on bermudagrass greens. Bermudagrass is actively growing now that nighttime temperatures are consistently within the 70s. PGRs increase the horizontal growth of bermudagrass, which improves surface smoothness and speed.

Remember, with periods of rains or persistent thunderstorms, sunlight is reduced. During the Florida rainy season slightly higher heights of cut need to be maintained to compensate for reduced sunlight. This is true with both Tifdwarf and ultradwarf bermudagrass putting surfaces.

Dealing with Mother Nature on a daily basis makes the life of a golf course superintendent very interesting. Although the elements cannot be controlled, there are a few tools available to help us cope with their effects.

Adapted from the USGA Links On Line Florida Region Update.

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