A Visit to Farmlinks
A Research and Demonstration Golf Course

The Farmlinks golf course is located on the 3,500-acre Pursell Farms near Sylacauga, Alabama. Farmlinks is billed as the world’s first and only research and demonstration golf course, and Pursell Technologies, who are the makers of Polyon coated fertilizers, have formed partnerships with leading companies in the golf and turf business in order to build and operate Farmlinks.

Toro has provided all of the equipment, Club Car has provided all golf carts, and Syngenta is involved with plant protectants. The participating companies then bring customers, potential clients and distributors to Farmlinks on a regular schedule throughout the year. Two groups are brought through each week, on average, and a total of about 1,000 visitors are invited each year; approximately 750 of those visitors are clients and distributors to Farmlinks.

The Experience

The Farmlinks experience, as it is called, by simply describing what I observed as I visited the facility for the first time in February 2005. I visited Farmlinks with a group from Pacific Golf Management, and we were accompanied by Toro and Simplot Partners representatives.

After meeting in Birmingham, we made the one-hour drive to Pursell Farms, arriving just before lunchtime on a Wednesday morning. All visitors stay at Parker Lodge, which sits just behind the 17th green of Farmlinks Golf Club. We arrived at the impressive lodge and were greeted by Pursell Technologies staff. A fire was burning in the massive stone fireplace, and a black bear stood stuffed just to the right of the door. Other hunting trophies adorned the walls of the lodge. We were each assigned a suite in the lodge for our stay; Dr. James Watson has a suite named after him, with appropriate furnishings, and the other suites are named after fertilizer products or distinguished people. After that warm welcome, we took a Polyon bus to the clubhouse for lunch, and then we continued on into Sylacauga to visit the Polyon factory.

At the factory, we met with the director of product testing and quality control in his laboratory. He explained to us how Polyon products are tested to ensure integrity, and the polymer application process was demonstrated in a laboratory-sized mixing drum. Then we went next door to a well-appointed theatre, where popcorn, candy and drinks are provided before one is instructed to sit down and listen to Dr. Jeff Higgins explain the various types of nitrogen fertilizer and their associated release characteristics.

This was probably the most educational aspect of the trip, as Dr. Higgins went through each class of nitrogen fertilizers, which he defined as fast release, slow release and controlled release. In fact, the Golf Course Superintendents Association of America (GCSAA) offers continuing education credits for this session. He further subdivided the primary classes of nitrogen fertilizers, and I will spare the details here; suffice it to say, however, that this thorough discussion of nitrogen products touched on all the commercially available forms of nitrogen fertilizer. The audience was taught, or reminded, about the release mechanisms of different nitrogen fertilizers. At the end of the two and a half hour presentation, curtains were opened at the front and side of the theater and a factory floor was revealed through glass windows. Below was Polyon fertilizer production, amidst mixing cylinders, conveyor belts and screens.

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The Experience

With that rather general introduction, it is probably easiest to convey a sense of the “Experience at Farmlinks,” as it is called, by simply describing what I observed as I visited the facility for the first time in February 2005. I visited Farmlinks with a group from Pacific Golf Management, and we were accompanied by Toro and Simplot Partners representatives.

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A representative from Toro then made a presentation, first in the conference room at the lodge, where he explained Toro’s role at Farmlinks and the methodology that Toro uses when developing innovative products.

For turfgrass managers, Pursell Farms and Farmlinks Golf Club really are a 3,500 acre recreation and education facility, as advertised on their website.

At the end of the presentation, the party went fishing, and the rest of us played Farmlinks, and after a catfish lunch, half of our group went to the turf nursery to operate and observe some prototype equipment for ourselves. We then made a presentation, first in the conference room at the lodge, where he explained Toro’s role at Farmlinks and the methodology that Toro uses when developing innovative products. Pictures were shown of some prototype equipment and technologies, and we then went to the turf nursery to operate and observe some prototype equipment for ourselves.

That was the end of the formal program at Farmlinks, and after a catfish lunch, half of our party went fishing, and the rest of us played golf at the Hurdzan-Fry-designed Farmlinks Golf Club. The course is notable for the various grass and soil types. The beautiful facility is billed as the world’s first and only research and demonstration golf course.

Above: A practice green at the Hurdzan-Fry designed Farmlinks Golf Club at Pursell Farms in Syxana, Alabama.

Below: A collage of images of Farmlinks Golf Club. The tee, roughs and fairways feature a variety of grass and soil types. The beautiful facility is billed as the world’s first and only research and demonstration golf course.

The next day began with a traditional Southern breakfast of bacon, eggs, grits, and biscuits and gravy. A representative from Toro then made a presentation, first in the conference room at the lodge, where he explained Toro’s role at Farmlinks and the methodology that Toro uses when developing innovative products. Pictures were shown of some prototype equipment and technologies, and we then went to the turf nursery to operate and observe some prototype equipment for ourselves.

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course are all 85%-15% sand-Profile. A chipp- 

ing green has Champion Bermuda in one sec-

tion, TifTurf in another, and TifEag in an-

other. Four of the fairways are planted to Zoysia.

One par 3 fairway is Sea Isle paspaltum. One

fairway is Tifway 419, and the hybrid blue-

graze called “Thermal blue” is planted in the

rough of one hole. The par three tees were

overseeded with ryegrass, and the fourth fair-

way was overseeded with ryegrass; one end of

that fairway included trials of different overseed-

ing practices.

I want you to know that we at Cornell rec-

ognize and greatly appreciate the valuable contribu-

tions your industry and turf managers make to the citizens of New York as environmental stewards. In addition to being knowledgeable and conscientious about integrated pest management, your industry provides recreational opportunities, preserves open green space, provides wildlife habitats, and prevents soil erosion. We applaud those efforts.

I also wish to use this opportunity to con-

vey the opinions that are more generally held by myself and the rest of the Cornell turfgrass team.

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tributions your industry and turf managers make to the citizens of New York as environmental stewards. In addition to being knowledgeable and conscientious about integrated pest management, your industry provides recreational opportunities, preserves open green space, provides wildlife habitats, and prevents soil erosion. Members of your industry cooperate with Soil and Water Conservation districts, Audubon International, the Department of Environmental Conservation, and many other organizations, and we applaud those efforts.

I would also like to express my sincere ap-

creciation for the close working relationship that Cornell's Land Grant mission are vital to both the turf industry to the environment and the economy of New York. These shared values with Cornell's Land Grant mission are vital to both us and another reason why this current situation is so difficult.

I trust that we can weather the current strain in the relationship between Cornell’s College of Agriculture and Life Sciences and members of the turfgrass industry produced by this unfortunate incident so we can move forward with the same positive momentum we have all worked so hard to build and sustain in the past. We look forward to solving current difficulties so we can continue to grow together.

Please contact my office with ideas as to when we might meet and who should be involved.

Sincerely,

Susan A. Henry, Ph.D.
The Ronald P. Lynch Dean
College of Agriculture and Life Sciences

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A Remarkable Place

We spent one more night and played golf again the following morning. For turfgrass man-

agers, Pursell Farms and Farmlinks Golf Club really are a 3,500 acre recreation and educa-

tion facility, as advertised on their website. Farmlinks is a remarkable place and the prod-

ucts of the sponsoring companies are not over-
told, although one is certainly aware of what companies have made this experience possible. I

would encourage anyone who has the oppor-

unity to visit there to do so. Farmlinks is al-

most an amusement park for golf course super-

intendents. The combination of sport, turfgrass

education, product demonstrations, and South-

ern hospitality is hard to beat.

Michael Woods

Dean Henry

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An Aspirin a Day for Heat Stress?

As the summer months progress our cool season turfgrasses begin to experience typical signs of temperature induced decline. This de-

cline is associated with depressed rates of pho-
tosynthesis (energy production) due to its in-

efficiency in fixing carbon at high temperatures into useful energy. However, heat stress pro-

duces a multifaceted stress response that in-

volves a number of metabolic activities leading to cell death.

Researchers at Rutgers University have been exploring the heat stress phenomenon for sev-

eral years and have identified a number of fac-

tors that will reduce overall stress. Recently, a

study was conducted investigating the applica-

tion of salicylic acid (SA), the active ingredient in aspirin, for improving heat tolerance of Ken-

tucky bluegrasses.

The researchers applied several rates of SA to bluegrass growing in a greenhouse and mea-
sured a number of physiological stress re-

sponses. They found that there were significant reductions in the amount of free oxygen radi-

cals that indicate the reduction in stress re-

sponse.

Oxidative damage is well known to be a key aspect of heat stress. Other products, such as cytokinin-based products including seaweed-

derived fertilizers, have also been shown in the Rutgers program to reduce injury associated with heat stress. More research is needed to

validate the benefits of this approach under field conditions, but the mechanism for improving this stress tolerance appears to be well un-

derstood.


Air Cooled

Heat stress and plant moisture management often includes regular light applications of wa-

ter, often called syringing. Syringing is thought to provide temporary reductions in surface tem-

peratures thereby alleviating the stress associ-

ated with drought and heat. In southern cli-

mates, where heat stress of cool season turfgrasses is orders of magnitude greater than in

northern climates, fans for air movement are

often used to reduce stress.

Researchers at Auburn University have been investigating the use of syringing and air move-

ment as a means of reducing surface tempera-

tures of creeping bentgrass putting greens. A

two-year study was conducted in Auburn, AL, investigating the effect of fans alone, syringing alone and fans plus syringing on a creeping bentgrass putting green.

Soil temperatures were reduced significantly by any treatment that included fan use. Syring-

ing alone had little to no effect on soil tempera-

ture and in some cases was shown to decrease root length density. Fans plus syringing reduced the time the soil temperature was at or above the critical temperature for injury by two to three hours compared to no cooling or syring-

ing alone.

The use of fans does not receive the attention it deserves as a means of improving heat stress tolerance and it appears, based on this study, that syringing is overrated. A compre-

hensive cooling program that incorporates wa-

tering and air movement will be critical during high temperature periods.


ringe application for cooling bentgrass greens. Crop Sci: 45: 245-250

Will You Be There?

2005 Empire State Green Industry Show

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