



# Deeply rooted in Florida

## University of Florida one of first sites for USGA turf research

BY JAMES M. LATHAM  
*USGA Agronomist & Regional Director, retired*

**D**id you know that the very first research grant on warm-season turfgrasses sponsored by the USGA Green Section was to the University of Florida? Yep — some 74 years ago. That was only two years after the establishment of the Green Section as a source of information aimed at solving problems on golf courses in the United States.

A sum of \$25 a month was provided to the Gainesville Experiment Station, entrusted to Vice Director and Animal Industrialist John M. Scott. C. V. Piper and R. O. Oakley, who were the Green Section research team then, apparently made the contact through their USDA work with forage plants. Incidentally, a Mr. L. C. Menager of the Florida Country Club in Ortega, served on the first Green Section Committee.

The initial work involved testing sod-forming grasses for their potential use on golf courses. A couple of years later the turf work was taken over by USDA Forage

Crop Agent C. R. Enloe, who sent duplicates of the Gainesville grasses to the Everglades Station (at no extra charge). Just growing the grasses in a pasture-like setting was not enough for Piper and Oakley, so they bought and sent a brand new, \$75.00 Pennsylvania putting green mower to Enloe, to determine how the grasses withstood daily mowing at putting green height — 3/8 inch.

Mr. Enloe didn't have the time to do this grunt work, but he found a graduate student who wanted to do research on grass root development. Thus came the first post-graduate student project supported by the Green Section, with an annual grant of \$750, later raised to \$900. The money was for labor and was not like the formal scholarship or fellowship grants we see today.

Mr. Addison Shuler Laird did an excellent job of measuring and photographing the root systems of the grasses under mowed and pasture conditions, with different fertility regimes in different soils and wrote his thesis entitled "A Study of the Root Systems of Some Important Sod-Forming Grasses" in 1927.

The USGA or the Green Section weren't exactly household words then, as noted in the Preface to the thesis: "So great has been the desire for accurate information concerning golf grasses in Florida that the American Golf Club Association has financed part of this investigation."

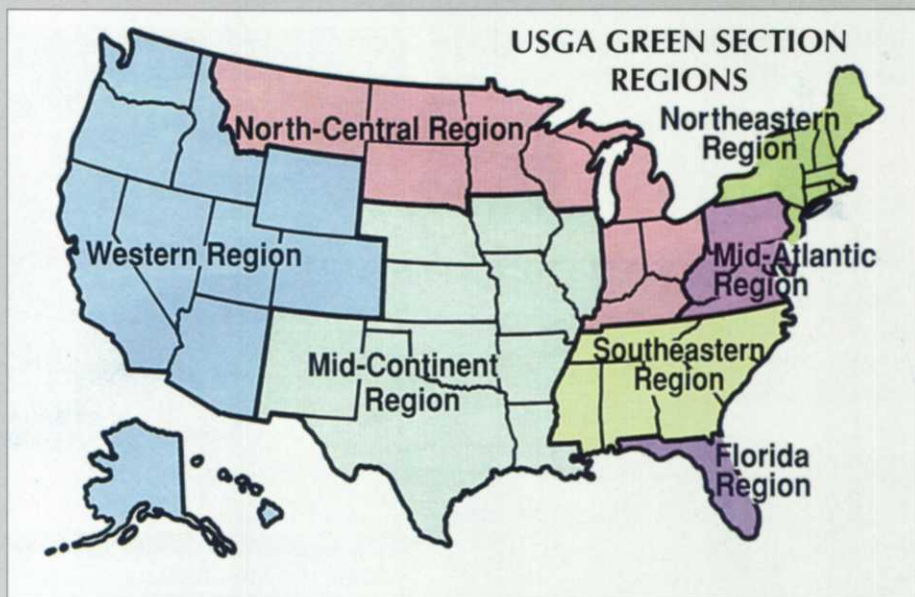
The thesis provided the basic material used in the production of Bulletin 209, published by the University of Florida Agricultural Experiment Station, entitled *Lawns in Florida* by C. R. Enloe and A. S. Laird, in 1930. Both publications are in the University Library.

In 1930, times were hard and the USGA could not continue the high-level grants, but could go for \$300. That could not support the present level of work, so the two organization mutually agreed to halt it. The connection was reestablished after World War II at the Everglades Experiment Station under the direction of Roy Bair.

This continued until 1950, when Mr. Bair resigned to go into private consultation work. Turf research was then moved back to Gainesville where, in 1952, Dr. Gene Nutter became the guru of grasses for



John Foy has been director of the Florida Region since it was separated from the Southeast Region at the beginning of the decade.





the state and brought the program up to a leadership position in the country.

The Florida experience is not unlike many of today's state or regional turfgrass research and extension programs. Many were initiated by seed money from the Green Section and the salaries of the turf specialists were picked up by the university administrations, through the prodding of local golf associations and golf course superintendent's organizations.

Turf-oriented research today, however,

is receiving less and less governmental support, so the Green Section is again playing a major role in its fiscal support, along with that of the local, regional and national superintendents organizations and a few privately funded research foundations.

Back in the days before the Green Section was established, Piper and Oakley were besieged by requests for information on the establishment and care of golf course turf. They had some small research projects

under way, but needed a vehicle to disseminate what little scientific information they had. The organization of the Green Section of the United States Golf Association did that, in 1921.

Working from Washington, D. C., with plots in Arlington, Va., (where the Pentagon now stands), they published *The Bulletin of the USGA Green Section*, a periodical containing articles on their research and those written by other learned men, on golf course maintenance.

Remember that the chairmen of green committees made most of the decisions on golf course maintenance at that time and greenkeepers (there were no superintendents then) just did the work. Chairmen attended the few turf conferences and went home to tell the greenkeepers what to do.

With the golfboom of the 1920's, came demands by southerners to do something for the courses below the bentgrass/bluegrass zone. The Tufts family of Pinehurst fame had been experimenting with grasses for several years to get some kind — any kind — of turf cover on their fairways (they were happy with sand greens).

But until the Green Section came along, there had been no organized effort to look into producing sod-forming grasses that were suitable for use on southern golf courses.

Another USDA scientist, plant pathologist Dr. John Monteith, came to the Green Section in 1928, to continue his work on plant diseases. His research introduced the use of inorganic mercury and other compounds for disease control and prevention.

It was during his administration that many of the named vegetative bentgrasses were selected. Those selections gave rise to many commercial turf nurseries and the impetus for commercial turf supplyhouses to develop high quality products for golf course use.

The Depression years had a stifling effect on existing golf courses and new course development. The fallout was felt in research and extension conducted by the Green

Section, since the only source of funds was memberships fees and admissions to the US Open and Amateur Champion-

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ships. All of the travel costs were borne by member clubs requesting personal visits or the golf organizations and universities sponsoring conferences or short courses. The shortage of funds was made worse during WW II by the shortage of scientists to conduct the work.

Fortunately for the turf industry, the Green Section hired a plant physiologist to administer the project and continue the research and extension work—Dr. Fannie Fern Davis. Her interest in plant hormones resulted in the discovery that a compound identified as 2,4-D could selectively remove broadleaf plants from grass populations. Her dislike of administrative duties led to her resignation in 1945.

She was replaced by Dr. Fred V. Grau, who preached strongly for the support of university training and post-graduate degrees for people interested in the turfgrass field. His efforts bore fruit with the establishment of a position at Penn State University that resulted in James R. Watson becoming the first recipient of a Ph.D. in

the turfgrass field. Many others have followed a similar route.

After W.W.II, the picture changed and golf associations felt the need for a kind of extension service not available in most states — one directly related to golf course conditions. Research carried on by the Green Section, then located in Beltsville, Md. was inadequate to answer questions from other climatic zones.

Several states had developed their own, more locally-relevant research projects with funding by the Green Section. The upshot was the creation of the regionalized Green Section Visiting Service, which took the pertinent information from regional and national research to individual clubs and help fit it into their maintenance programs.

The agronomists in each region visited member clubs and courses on a regular basis to evaluate conditions and help solve existing problems and prevent others from developing. In 1954, Mr. B. P. Robinson became the first of these agronomists to serve Florida—and six other southeastern

states. He was followed by several others, until the golf industry in Florida became so large that it became a one-state region with John Foy as its Director.

Leadership of the Green Section since Dr. Grau's departure has been vested in men who had served as regional agronomists — Dr. Marvin Ferguson, Mr. Bill Bengueyfield, and Mr. Jim Snow. Each of them has made significant contributions to golf: Ferguson by initiating the putting green construction studies, Bengueyfield by inaugurating the massive maintenance and grass development projects and Snow by broadening the program to include environmental proactivism on individual courses. There have been too many fine field agronomists to name in this article, but all have had a lasting, positive impact on golf course quality in the areas they served or serve today.

Through the years since 1921, the Green Section has grown to be the primary source of science-based golf turf information. From the \$300 spent in 1923



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on research outside of the DC home base, its budget for research and support of environmental improvement grew to over \$1.3 million in 1997, requiring the full-time attention of Dr. Mike Kenna.

There are now seven regional offices across the country, staffed by 16 "visiting agronomists." The interest in building or rebuilding greens or entire golf courses created the need for a Construction Education Program, directed by Mr. Jim Moore, from which the latest information on the art and science of golf course construction can be obtained.

*The Green Section Record* is the current periodical publication of the Green Section, which closely adheres to the principles established by *The Bulletin of the USGA Green Section*, in the 1920's: interesting, factual, articles by knowledgeable authors — and no advertising.

Simply gathering and disseminating turfgrass-related information is not the end of the line. There was a need to develop a central preservation facility to accumulate and catalog the thousands of books, research papers, magazines and popular articles dating from the days of yore to the present and into the future.

Dr. James B. Beard saw the need and, working with Dr. Richard Chapin, Director of Libraries at Michigan State University, found a home for the collection of the books and periodicals accumulated by O. J. Noer during his agronomic career with the Milorganite Division of the Milwaukee Sewerage Commission.

The Noer Memorial Collection proved to be the seed for the development of the Turfgrass Information File at MSU, through special grants by the Green Sec-

***From the \$300 spent in 1923 on research outside of the DC home base, its budget for research and support of environmental improvement grew to over \$1.3 million in 1997, requiring the full-time attention of Dr. Mike Kenna.***

tion. TGIF is the most complete library of turfgrass publications in the world and is accessible by any mode of communication. Mr. Peter Cookingham has done a masterful job of organizing and maintaining the files. It was he who located the Florida publications mentioned in this article.

The surge of environmentalism in the 1980s brought the golf industry under an unkind light that stirred the USGA to begin a multi-million dollar research program on golf course maintenance procedures and materials.

USGA President Grant Spaeth said that if golf was guilty of contaminating the environment, it would have to clean up its act. But if not, golf needed hard, unbiased, scientific facts to disprove the accusations.

That program is still under way through the Green Section Environmental and Research Committee, which is charged with providing funds to further an understanding of the influence of course maintenance operations on environmental conditions and to produce new grasses and procedures that require less intensive use of fertilizers, pesticides and potable water.

To help golf organizations set up formal programs of environmental stewardship, the Green Section has wholeheartedly supported the educational efforts of the Audubon Society of New York State, now Audubon International. Its Cooperative Sanctuary Programs have helped superintendents develop positive, written procedures to preserve and protect the environmental treasures on individual courses and their surroundings.

Throughout its long existence, the USGA Green Section has worked for the good of the order, by supporting good science in turfgrass research and then getting the word out. It has been a strong supporter of golf course superintendents — their continuing education and their organizations. All of this has been done with one goal in mind — to provide America's golfers with the best possible playing conditions at a reasonable cost for the greatest number of days, every year.

*Editor's Note: Jim Latham served the USGA Green Section as Southeastern Agronomist from 1957 to 1960, and as Director of the Great Lakes Region from 1984 to 1994.*



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