The latest trend in Poa annua research is the development of new, improved types that are more tolerant of stress and provide a better playing surface than wild types. Although this research has been aimed primarily at developing cultivars for greens, it may also result in new grasses for fairways, at least in climates where P. annua is particularly well adapted.

**Wheatgrasses**

In dry parts of the Midwest, in places too cool for warm-season grasses, Fairway crested wheatgrass (Agropyron cristatum) and western wheatgrass (Pascopyrum smithii) are suitable on fairways, if irrigation is unavailable. Irrigated Kentucky bluegrass is still a better choice in this region, but these grasses provide a possible nonirrigated alternative.

Fairway crested wheatgrass is a bunch grass, whereas western wheatgrass has short rhizomes. Both species are relatively coarse-textured and develop a turf with a lower density than Kentucky bluegrass and perennial ryegrass. Although wheatgrasses were common on low-maintenance fairways in the '60s and '70s, their use has decreased in recent years, and most new courses in drier regions now use fairway irrigation. The species still provide low-cost alternatives where water is limited.

**Weeping Alkaligrass**

Weeping alkaligrass (Puccinellia distans) is a gray-green, tufted bunch grass that can provide reasonably good-quality fairway turf. This cool-season grass has relatively good heat and cold tolerance. Its use is limited to situations where sodium levels are so high that other grasses will not survive. Sodium can come from sewage effluent water, deep wells or natural soil concentrations, particularly in the West.

Weeping alkaligrass is much more tolerant of sodium than Kentucky bluegrass and creeping bentgrass and can be a substitute where necessary. Sodium is rarely found uniformly over an entire golf course and is often found in low pockets where it can kill less-tolerant grasses. Weeping alkaligrass is often successful in these areas. It is a bunch grass, and overseeding is important to maintain a uniform, dense turf.

**Warm-season Grasses**

Although the Midwest is generally a cool-season region, some warm-season species are used on fairways in the southern and western sections. In southern Illinois, Missouri and Kansas, bermudagrasses (Cynodon species and hybrids) can be used, although their sensitivity to cold temperatures may result in significant turf loss some years.

Zoysiagrass (Zoysia japonica) is better adapted because of its greater cold tolerance. Properly managed zoysiagrass can produce outstanding fairways that are the envy of golfers from the central and northern region of the Midwest, who, after visiting Kansas or Missouri, often ask their local superintendents why they cannot have zoysiagrass on their tees and fairways.

Even though zoysiagrass can tolerate very cold winters and will survive as far north as the Canadian border, it goes dormant as soon as temperatures cool in the fall and does not green up until well into the spring. This greatly limits its appeal outside the southern Midwest.

Buffalograss (Buchloé dactyloides) is for drier parts of the Midwest. It does not provide the turf quality of zoysiagrass or bermudagrass, so these species are preferred where sufficient moisture is available. The advantage of buffalograss is its tolerance of hot, dry conditions. It is sometimes used on nonirrigated fairways in western Kansas and Nebraska.

Although the blades of buffalograss are relatively fine-textured, its thick stolons and swollen nodes give it a coarse-rough texture. It also lacks the density of bermudagrass and zoysiagrass at lower mowing heights. Recent breeding and selection have produced several improved cultivars, and in the future it may be more widely used on courses in the drier regions of the Midwest.

**The Future**

The past two decades have brought many new grasses and cultivars, and this trend is likely to continue. The choices available to the superintendent should increase. The rapidly expanding field of biotechnology, which is already yielding developments such as grasses that are tolerant of nonselective herbicides, should bring many advances in the next few years.

It will be an exciting time to be involved in turfgrass management. These rapid changes will also mean that continuing education will play an even greater role in the superintendent’s career.

**References**


(Editor’s Note: Nick Christians, Ph.D., specializes in turfgrass science in the horticulture department at Iowa State University.)
You won't find it in the shop. Thanks to the exclusive FlashAttach™ reel-mount system, the new Jacobsen LF-128 fairway mower spends more time where it belongs—on your fairways. The patented FlashAttach system makes changing any reel as easy as pulling a pin. No tools. No headaches. No more than 30 seconds of your time. After all, we know you have better things to do than change reels on fairway mowers. Call 800-727-JAKE for your nearest Jacobsen distributor or visit us on the World Wide Web at www.jacobsen.textron.com.
MTGF Names New Communications Director

The Minnesota Turf and Grounds Foundation has hired its first Communications Director: Greg Crawford of Crawford Marketing, Portland, Ore.

Greg will be responsible for broadening the foundation's public relations efforts to a wide variety of sources and creating ideas on how MTGF can enhance its image as a foundation and its respective allied associations.

"Greg has an extensive list of clients in the turfgrass industry and is recognized internationally for his work in the communication field and his ability to enhance and promote the client's image," said Bob Mugaas, MTGF executive director. The MTGF Public Relations Committee carefully evaluated people who we felt should be in charge of an expanded public relations effort. We feel extremely fortunate to have Greg working with us, as we hear from many positive things about Greg's abilities in this field.

Following is information provided by Greg to the MTGF Public Relations Committee earlier this year:

"Crawford Marketing specializes in helping clients increase their exposure, enhance their image and start a first time media program if desired."

"The company was formed in 1992 and its first client was the Oregon Golf Course Superintendents Association. Over the course of the last seven years there have been more than 150 print stories, 30 television and radio interviews and numerous other media activities generated by Crawford Marketing, Inc. about the OGCSA. The two recently agreed on a new five-year contract.

Another highlight of Crawford Marketing was its promotion of Tom Wolff and his staff during the 1998 PGA at Sahalee Golf Club. During the course of the two-year media campaign Wolff had over 400 contacts from media throughout the world and it is safe to say no superintendent has received that type of media coverage ever.

"The philosophy of Crawford Marketing is to let the clients be the stars and to stay in the background and just get the job done. Anyone contracting with Crawford Marketing also will have the services available to them 365 days a year if needed. We make ourselves available at all times of the week, because we know the public and the media demand information and many times need information immediately."

"While we are all confident about the job he will do, there does need to be a word of caution in that the MTGF is a very young organization," Mugaas said, "Our public relations efforts are even younger. In fact, we have really never pursued an organized public relations campaign previously and, as such, it will take time to build relationships with the media and other sources Greg will be contacting. We all need to be patient in the initial stages.

Finally, on behalf of the MTGF Board, I would like to sincerely thank the Public Relations Committee for moving forward on this initiative and doing the work needed to have Greg become involved with our Foundation," Mugaas said.
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**What you can expect:**
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**Load the sprayer and GO!**
The focal point of the USGA Green Section is the Turf Advisory Service (TAS). First started in 1953, this service permits individual facilities to reap the benefits of on-site visits by highly skilled USGA agronomists located in Green Section offices throughout the country.

Each agronomist visits more than 130 courses annually. Their experience helps golf course staff and officials produce the best possible golf turf for the dollars that can be spent.

The TAS's purpose is not to tell anyone how to run a golf course or what products to buy. Rather, it seeks to bring a wealth of information and an impartial yet concerned perspective regarding turfgrass growth requirements, how these requirements might best be managed for golf and ideas that other golf courses have found to be beneficial.

Each course visit results in a complete written report to the course. This document provides a permanent record of observations and recommendations. It typically reviews subjects such as current maintenance programs, course condition; environmental subjects, safety issues; and long-range planning. This document also monitors progress made between visits and can help courses better target budget dollars for maximum benefit.

The lines of communication don't end with the written report. USGA agronomists remain available for ongoing consultation by telephone and correspondence, and, with advance scheduling, may be available to address meetings, conferences, and seminars.

Is the TAS a worthwhile expenditure for a golf course to make? Since more than 95% of approximately 1,600 annual TAS subscribers continue regular visits, the tangible benefits derived from regular visits appear obvious. The 1999-2000 list of America's Greatest 100 Golf Courses compiled by Golf Digest featured 83 TAS subscribers, including 45 of the top 50. TAS will help any course -- whether public or private, large or small, urban or rural -- save money, improve efficiency, maintain high standards and produce a quality golf course.

Why should anyone pay the Green Section for advice? Advice is only as good as its source, and the background, experience, and expertise of the USGA Green Section is unparalleled. The USGA Green Section is the only agency in the country devoted solely to golf course turf, its playing conditions and its management. It sells nothing. Instead, it lends its expertise that cannot be matched by any other agency anywhere.

Inquiries about the TAS are always welcome. Contact either the USGA's national headquarters or the appropriate regional Green Section office.

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GCSAA Explores Internet Opportunities, Strategy

GCSAA recently kicked off a new initiative focused on using the power of the Internet to enhance its existing member services and deliver new products and services to the industry. The initiative is also designed to streamline the way the association currently conducts many of its business processes.

To assist with this effort, GCSAA hired META Group Consulting in late March to help GCSAA develop a comprehensive Internet strategy for the organization. Phases of the project will include examining and prioritizing member needs, exploring new Web-only services such as e-commerce and online education, evaluating the association’s current use of technology, and looking at options for providing more technology education to increase member utilization of GCSAA Online.

To assist in the initiative, META and staff will rely heavily on the input of two member groups established for this project:

1. The Web strategy committee, which consists of superintendent members who will provide ideas and input on needed online products and services for the profession.
2. The Web industry advisory group, which consists of industry representatives who will serve as a sounding board for new ways of bringing the information and resources of the industry together to provide enhanced services for members.

The umbrella group is chaired by GCSAA President R. Scott Woodhead, CGCS, with GCSAA’s Secretary/Treasurer Mike Wallace, CGCS, serving as vice chairman.

Although members involved with the project have signed non-disclosure agreements because of the sensitive nature of strategic discussions, GCSAA will be providing regular updates on the group’s progress through the web site and its discussion forums, as well as through several publications including Newsline, GCSAA’s NewsWeekly, and the GCSAA Online Report.

In initial steps of the project, all members involved with the project are undergoing extensive private interviews directly with META to offer their ideas and provide a baseline assessment of GCSAA’s offerings. To gain greater member perspective, META will also survey members of the membership standards resource group and the career development, education, membership and certification committees, which will meet concurrently in mid-April. A broader survey available to all web users is also being planned.

Although a timeline for implementation cannot be determined until specific services have been defined, plans currently call for the strategy development phase to be completed by early summer.

The META Consulting Group specializes in helping organizations leverage technology to help them better meet their business needs. The group was chosen from a field of 12 highly-rated information technology consulting firms. Staff reviewed all proposals and narrowed the field to three candidates who were then asked to formally present their methodologies to the committee chairmen and staff. Other clients of the META Consulting Group include IBM, EDS, 3Com, Georgia-Pacific and Ciba Specialty Chemicals.

If there are particular online services you would like to see addressed by this initiative, contact Sharmion Linseisen-Kerley, senior manager of Internet services, at (800) 472-7878, ext. 620, or e-mail slinseisen@gcsaa.org.

Blue Tag Reminder

Turf-Seed/Tee-2-Green is continuing to contribute 50 cents for every Turf-Seed variety or mixture blue tag and $1 for every Tee-2-Green Penn Pals variety or mixture blue tag turned into The GCSAA Foundation as part of The Foundation’s five-year endowment campaign.

Half of the money donated goes toward the campaign, “Investing in the Beauty of Golf,” and half goes to each participating GCSAA member’s affiliated chapter.

Superintendents can clip the blue tags from the appropriate turf seed varieties and mixtures and send them to The GCSAA Foundation, 1421 Research Park Drive, Lawrence, KS 66049, along with their membership number and affiliated chapter.
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MGCSA Research Committee Goes on Tour
Stops Included Rolling Green, The University of Minnesota and Indian Hills

Rick Fredericksen, CGCS, Research Chairman, and eight other members of the MGCSA Research Committee visited Rolling Green Country Club, the University of Minnesota and Indian Hills Golf Club on April 5.

Pat Walton, CGCS, and Rolling Green Country Club let the MGCSA conduct a cover study on their par 3 course the past few years. Jon Powell and Pat led the committee around the course to view what effect the different covers had on the greens.

The tour then went to the University Turf Plots where Troy Carson explained some of the different grass studies being researched.

Dick Grundstrom met the group at Indian Hills Golf Club. Don Taylor showed some of the findings of different top dressing practices.

The MGCSA Research Committee, from left: Tom McCann, Keith Scott, CGCS, Rick Fredericksen, CGCS, Rob Panuska, Paul Eckholm, CGCS, Pat Walton, CGCS, Jon Powell, Bob Simondet, and Tom Proshek.
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