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On the cover: The turf at Infinity Park, the only municipally owned rugby-specific stadium in the USA, is managed by Josh Bertrand and his full-time assistant Noel Harryman, was named 2011 Sporting Grounds Field of the Year by the STMA. That's Diego Aguilar running the equipment.

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From the Sidelines



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Hiring seasonal employees

THIS MONTH I turn this space over to Ed Hall, the superintendent of parks and grounds for the City of Bowie, MD. At my request Ed addressed the issue of hiring seasonal workers and here's what he had to say:

"The hiring of seasonal or temporary labor can be a tremendous benefit if managed properly. The employment of seasonal labor can save considerable funds while filling many labor shortage problems. It also provides the opportunity for employees to gain experience and be evaluated for future promotion to full time status.

"The City of Bowie Parks Department had hired seasonal labor for many years but has only recently used this important employment tool to maximize its benefits.

"When this program was begun many years ago, it was mainly to provide summer employment for the City's youth. And since it employed unskilled labor the pay scale was minimum wage. This approach was changed about 12 years ago because of a decline in interested applicants and the need to have employees later in the season. We created a two-tiered pay system, one for summer help and one for temporary labor. We currently employ eight to ten seasonal workers.

"The summer help employees work from June through August and are typically high school kids. The best of these are then recruited to return, and many work through college. They get an increase in pay every year they return. The temporary workers start in April and work through mid December and are paid at the same rate as an entry level Parks employee but without benefits. Since we have changed our hiring procedures, we have had many more qualified applicants than positions. The program has worked so well that the current full time staff of 32 has had half of the employees make the transition from seasonal or temporary labor to full time. And when a vacancy does occur, it is almost always filled by a temporary staff member negating the need to go through the outside hiring process.

"The work that is performed by summer help workers consists of working with various crews doing line trimming, refuse pick up, painting, planting flowers, and miscellaneous labor. Most of this work is performed by those that have never worked before and are learning what manual labor is all about. The work performed by temporary laborers would also consist of working with an assigned crew operating mowers, line trimming, working in and around storm water management ponds and channels, ball field maintenance, and the bulk leaf program. These individuals typically are more mature and have worked for our department for more than one season or have an employment history in grounds maintenance.

"We have had excellent success hiring retired individuals who are looking for employment in the milder weather months. They tend to have excellent work habits and can bring a wealth of knowledge and skills from their respective former careers that can have a very positive influence on younger staff members. It has never been more important than the current time to maximize the efficient use of labor of any type and the use of seasonal employee's can give a grounds maintenance operation the required labor force to complete the many numerous and labor intense projects."

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President's Message

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A wise use of resources

STMA'S ENVIRONMENTAL COMMITTEE IS the source of inspiration behind this month's message as they are tackling a host of issues related to sustainability, environmental protection, etc. My perspective of resources will take a different spin, however, as I wish to reflect on the talents of our people and our resources that make STMA so valuable.

STMA's most valuable resource is its people, beginning with you as a member, the HQ staff, the Board, and of utmost importance to the continued growth and success of STMA, our committees. At our spring Board meeting, we gave extra attention to the distinction between "Board responsibilities" and "committee responsibilities." The Board's purpose is to set the direction and the committee's purpose is to figure out how to take us there... and CEO Kim Heck does a great job reminding the Board when we wander into the area of doing the committee's work!

I want you to know how much the Board appreciates your volunteer spirit and the time, dedication, and commitment you demonstrate so willingly. We are truly a "committee-led" organization and it is extremely rewarding to witness this year's committees becoming fully engaged in the pursuit of the goals of our new strategic plan.

Our Website Committee has produced another valuable resource in its upgraded website and the improvements and additions continue. Many of our outreach resources have been posted online by Education Director Kristen Althouse and STMA's Information Outreach Committee continues to work diligently to increase the number and type of outreach publications available to members. Many of these resources were developed by your peers, so they have the unique perspective of sports turf managers facing the same challenges as you.

And don't forget the availability of two other resources: TGIF (Turfgrass Information File) and the PCI (Playing Conditions Index). Both require some time to get comfortable in their use, but once you are familiar with these resources, you have tools to use for years to come. TGIF is the preeminent searchable library for all things "turf" and PCI is a peer-developed field assessment tool that provides a comprehensive evaluation of athletic fields and facilities, identifying both limitations and strengths.

A brand new membership resource is detailed in this month's issue, the partnership between STMA and the Plant Management Network (PMN) [see page 42]. Carefully read this article and then spend a few moments exploring the information available to you through PMN. Of particular interest to sports turf managers is access to the e-journal *Applied Turfgrass Science*, a peer-reviewed scientific publication that is intended for an applied audience, not academicians. The PMN site also provides access to an extensive photo gallery, the latest data from pesticide evaluation trials, and a searchable link to university extension websites.

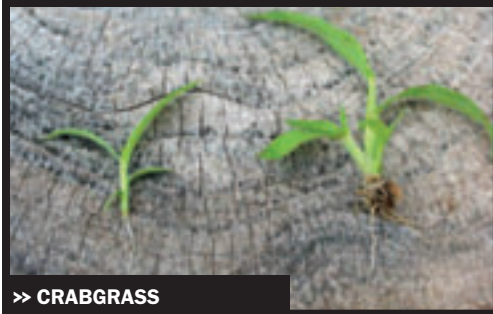
Finally, this spring provided a lot of great banter back and forth between myself as a Kentucky graduate and HQ's predominantly Kansas alums. My compliments to the never-quit attitude of the Jayhawks, but after all was said and done, KU had to "bow to the brow"! Take care, everyone.

A handwritten signature in black ink that reads "Mike Goatley". The signature is written in a cursive, slightly slanted style.

Post-emergent weed control for sports fields



>> DANDELION



>> CRABGRASS



>> GOOSEGRASS



>> PROSTRATE KNOTWEED

Images above

>> **DANDELION** is a perennial broadleaf weed that is best controlled in early fall.

>> **CRABGRASS** is a summer annual grassy weed. Best control for post-emergent herbicides is at the 1 to 3 leaf stage (left). Products containing quinclorac are best in the early tiller stage (right).

>> **GOOSEGRASS** is a summer annual grassy weed that will emerge after crabgrass.

>> **PROSTRATE KNOTWEED** is a summer annual broadleaf weed that is an excellent indicator weed for soil compaction.

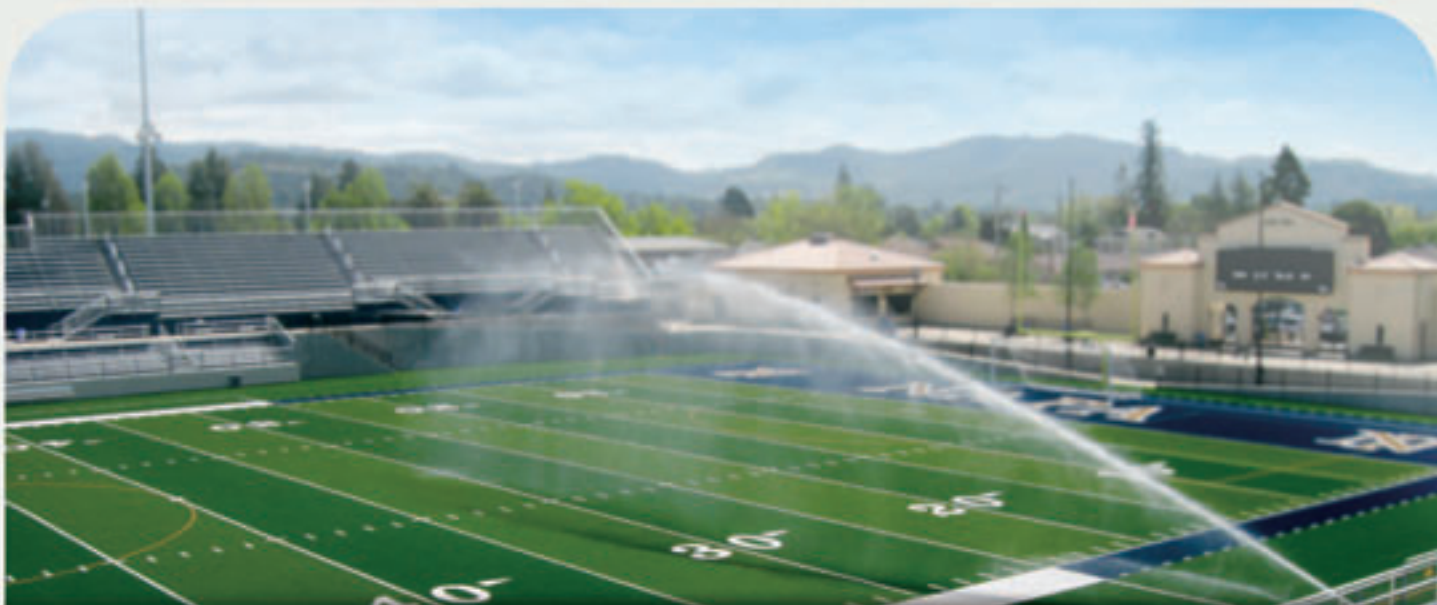
ONE GENERAL COMMENT that can be made about weeds is the fact that they are there due to a weakened stand of turfgrass. Culturally, we can reduce our potential for weeds if a dense stand of turfgrass can be maintained at the highest cutting height possible. While most sports fields are mowed at relatively close mowing heights as compared to a home lawn, we do know that going from 1½ inches to 3½ inches can reduce annual weeds by 80%. Weed seed requires light for germination and a dense turfgrass canopy mowed taller creates a shade effect. Obviously we are not saying that all sports fields should be mowed at 3½ inches. However, in some situations, keep in mind that if we can get by with a higher mowing height every additional ¼ to ½ inch does help; we can reduce weed infestations.

Often weeds are properly identified and the first question asked is, “What do I spray to kill it or control it?” Most extension specialists or weed scientists can give a short-term solution to that question. What we would like you to ask yourself first is, “Why is this weed there?” Knowing why weeds exist outside of having a weakened turfgrass can sometimes dictate changes in our cultural practices that may impact the level of infesta-

tion we have. Understanding that some weeds favor compacted soils, droughty or poorly drained soils, low or high soil pH, low or high nitrogen, low fertility and/or shade can help identify needs for perhaps aeration, grade work, proper fertility and irrigation, and soil testing (see table below)

Treating weeds after they emerge allows for proper identity of the weed species. However, several weed species are difficult to identify in the seedling stage. It’s only after they become more established and unsightly before correct identification can be made. Controlling weeds when they are young and actively growing will provide the best post-emergence control. Grasses are best controlled prior to tiller. Broadleaves are best controlled in the 2 to 4 leaf stage, sedges usually in a 3 to early 6 leaf stage. Avoid mowing within 24 to 48 hours before or following applications of post-emergence herbicides. The goal here is to provide maximum leaf area for maximum plant uptake. Irrigation within 24 hours after post-emergence applications should be avoided. Note that many new formulations of post-emergence herbicides are rain-fast within 6 hours. Be sure to check the label. Drought stressed weeds should be irrigated 24 hours before applications of herbicides for improved efficacy.

Other Reasons Weeds Exists	Weeds
Low Mowing	Annuals such as annual bluegrass, chickweed, crabgrass, speedwell; also plantains
Compaction	Annual bluegrass, crabgrass, dandelion, goosegrass, pineapple weeds, prostrate knotweed, prostrate spurge, speedwell
Drought	Black medic, cinquefoil, clovers, crabgrass, curly dock, goosegrass, prostrate spurge, speedwell, yellow wood sorrel
Poor Drainage/ Wet Soils	Barnyardgrass, buttercups, nutsedge, plantains
Low Soil pH	Common mullein, English daisy, hawkweed, knawel, red sorrel, wild strawberry
High Soil pH	Broadleaf plantain, hop clover, wild carrot
Low Nitrogen	Black medic, clovers
High Nitrogen	Annual bluegrass
Low Fertility	Foxtails, henbit
Low Calcium	Dandelion
Shade	Chickweeds, moss, speedwell, wild violets



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Grassy Weed Control Products

Trade Name	Common Name	Turfgrass Species*
Acclaim Extra	fenoxaprop-ethyl	Z, KB, TF, PR

After proper identification, management principles of cultural and mechanical control strategies should be considered before chemical control strategies. Selection of a post-emergence herbicide requires several questions be answered before that decision is made. 1) What are the turfgrass species involved? Keep in mind that some turfgrass mixes may work for some products, but not all. An herbicide may be applied to tall fescue, but not Kentucky bluegrass. 2) Are there any site restrictions, temperature restrictions for the product? 3) What is the re-entry interval before fields can be used? 4) And, with many post-emergence herbicides; what is the re-seeding interval for turfgrasses or effects on new turfgrass seedlings? And finally, 5) know how “established turfgrass” is defined; is it two or more mowings or something else? Knowing the answers to these questions will help sports field managers decide the best post herbicide for their weed control situation.

Some 20-plus years ago as my memory serves me, post-emergence applications in many situations were considered rescue treatments. Of course this related to failures in pre-emergence herbicides that controlled summer annual grassy

and broadleaf weeds. Post-emergent grassy weed herbicides were limited then as they still are now for cool-season turfgrasses. The biggest arsenal of post-emergent herbicides available for sports field managers has been for broadleaf weed control. And now, we see a wide array of combination products that control both grassy and broadleaf weeds with a single application. Along with all these products, we have a growing assortment of post herbicides specifically used on warm-season turfgrasses.

As you read through this article, you will find a toolbox filled with products for post-emergent weed control. With the onset of spring coming 4 to 5 weeks earlier this year in many areas of the country, post emergent herbicides will more than likely be part of a weed control program. These products will be separated into specific categories based on the weeds they control—grasses, broadleaves, grasses and broadleaves, and sedges. Each will be discussed and presented in a table format in order to provide a complete understanding of the tools we have available for post weed control (see table above).

With the removal of MSMA from the market, control of several annual grasses falls on

products like Acclaim Extra, Dimension, and Drive XLR8, etc. when post activity is needed. However products like Dimension and Drive XLR8 offer more in control of several broadleaf weeds as well. One advantage offered by Acclaim Extra is its suppression of bermudagrass, if bermudagrass is targeted as a weed.

As stated earlier, our biggest arsenal of post-emergent products has been for broadleaf weed control and believe me; this is the short list. Keep in mind that various active ingredients and combinations of active ingredients offer a diverse number of uses and weed spectrums. Therefore, it is important to view labels in great detail before purchasing any weed control product (see table bottom left).

Many of the grass and broadleaf control products will fall into the sulfonyl-urea class of chemistry: Certainty, Katana, Manor, Monument, and Revolver. These are primarily used in warm-season turfgrasses for the removal of annual and perennial grassy weeds; however, most will control a spectrum of broadleaf weeds. These are often called “transition products” as they are used to remove cool-season grasses from warm-season grasses during spring transition.

Several combination products specifically designed and marketed as grass and broadleaf control products include quinclorac as one of their active ingredients: Onetime, Q4 Plus, Quincept, and Solitare. Manufacturers were quick to formulate and re-formulate products with the loss of MSMA and the addition of quinclorac is an excellent substitution.

Tenacity provides excellent control of many grassy and broadleaf weeds as a post-emergent and can be used on established or newly seeded turfgrasses (see table on top of page 11).

Sedge control products remain strong and offer excellent versatility for both warm and cool-season grasses. Prosedge and Sedgehammer provide control of sedges in cool-season grasses, where Certainty and Monument not only provide excellent sedge control in warm-season grasses, but also control annual and perennial grasses and some broadleaf weeds (see second table on page 11).

All herbicide information is presented with the understanding that no endorsement of named products is intended by STMA or the University of Missouri, nor criticism implied of similar products that are not mentioned. This article is not a substitution for any product label. Before using any herbicide please read the label carefully for directions on application procedures, application rates, first aid, storage and disposal. Make sure that the herbicide is properly registered for the intended use. Carefully

Broadleaf Weed Control Products

Trade Name	Common Name	Turfgrass Species*
4-Speed XT	2,4-D + triclopyr + dicamba + pyraflufen-ethyl	B, Bh, Z, KB, TF, PR
Cool Power	MCPA + triclopyr + dicamba	B, Bh, Z, KB, TF, PR
Escalade 2	2,4-D + fluroxypyr + dicamba	B, Bh, Z, KB, TF, PR
Millennium Ultra 2	2,4-D + clopyralid + dicamba	B, Bh, Z, KB, TF, PR
Speed Zone	carfentrazone-ethyl + 2,4-D ester + MCPP-p + dicamba	B, Z, KB, TF, PR
Speed Zone Southern	carfentrazone-ethyl + 2,4-D ester + MCPP-p + dicamba	B, Bh, C, K, SP, StA (common only), KB, TF, PR
Spotlight	fluroxypyr	B, Bh, C, StA (except FL), Z, KB, TF, PR
T-Zone	triclopyr + sulfentrazone + 2,4-D ester + dicamba	B, Bh, Z, KB, TF, PR
Trimec 1000 Low Odor	2,4-D (DEA) + 2,4-D (DMA) + MCPP-p + dicamba	B, Bh, Z, KB, TF, PR
Trimec Classic	2,4-D + mcpa = dicamba	B, Bh, Z, KB, TF, PR
Triplet Low Odor	2,4-D + MCPP-p + dicamba	B, Bh, C, StA, Z, KB, TF, PR
Turflon II Amine	2,4-D + triclopyr	KB, TF, PR
Turflon ester	triclopyr	KB, TF, PR