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Top of mind

AT BLUE ASH GOLF COURSE NEAR CINCINNATI, CULTURAL PRACTICES CHANGED TO PROVIDE GOLFERS WITH A MORE PLEASANT EXPERIENCE

by
JOHN
WALSH

Throughout the country, competition among golf courses, especially public ones, is pretty stiff. The influx of courses opened during the late 1990s contributed to this. If a golfer is unhappy with the course he plays regularly, he can choose to play another nearby just like that. Golfers have the upper hand, and if superintendents don't help meet their reasonable requests or keep them top of mind, they might see fewer rounds, and in turn less revenue, at their course. Superintendents need to help keep golfers happy to prevent them from leaving their course.

Dan Walter, golf course superintendent of the Blue Ash (Ohio) Golf Course, says that throughout the past five years, times have changed with what superintendents can do to increase play or maintain it.

"It used to be when I ran into a fellow superintendent, it was, 'Hello, how is everything at the course,' and the reply used to be agronomic related," Walter says. "Now the answer is, 'Rounds are down,' or something to that effect. Almost every conversation I have starts off with the business side of the industry, not the agronomic side. What a difference five years make."

Blue Ash Golf Course, which opened in 1979 and is owned and operated by the city of Blue Ash, generates about 38,000 rounds a year.

"We used to average 44,000 rounds, and 1998 was the last time it was that high," Walter says. "There has been a decline of 800 to 1,500 rounds a year. Now we budget for 38,000."

Despite the decline of rounds, rates have


been a steady \$40 a round throughout the week over the years.

"We haven't raised fees in five years," Walter says. "The fees are right in line with the other high-end public courses. Other courses offer discounts, but we want to stay consistent, although we do have junior and senior specials."

Every course built in Blue Ash's market during the past 10 years has been an upscale public course, stiffening competition, according to Walter. That competition has influenced a change of attitudes and cultural practices throughout the years because course management wants to retain repeat golfers.

"We make sure golfers are treated first and that we're more customer friendly," he says.

Seventy percent of Blue Ash's business is repeat play. The city is relatively small and has a



To speed up play and increase rounds, Blue Ash removed some trees and flatten the excessive undulation of some greens.

Photo: Chris Cone

population of 12,000. But there are an additional 70,000 who work in the city because of the many executive offices and large corporations headquartered there. Walter says many business executives golf at Blue Ash because it's only two miles away from their corporate headquarters.

Out of the way

To help please the repeat golfers, Walter and his crew avoid doing cultural practices (i.e. spraying greens, tees and fairways) during the day, which can disrupt play. Instead, they do them on Monday and Tuesday mornings.

"It sounds simple, but from April 15 to October 15, we're spraying pesticides on the course," he says. "Given that we spray greens every two weeks, and the fairways and tees every three weeks with a nutritional spray in between, the sprayer is on the course every week. The repeat business on Mondays and Tuesdays doesn't want to associate their play day with a spray day. That's the reason we spray early and don't allow golfers to be impacted."

Topdressing is another disruptive practice that needs to be weaved into the schedule and must get done during the busiest part of the season.

"In the past, we used to not hesitate to topdress among play, but now we make it a priority to avoid play," Walter says. "So if the Monday we had scheduled isn't sunny and warm to allow for drying, we must wait till the next Monday when we open at 9 a.m. instead of impacting golfers on the other weekdays when we open at 7 a.m."

The course, which used to open at 7:30 a.m. on Mondays, now opens at 9 a.m. so the maintenance crew can get a jump on their work, making them less likely to interfere with golfers.

Scheduling aerification is different from scheduling topdressing. It's scheduled early and late in the year to allow for golf outings to be fit in when requested.

"In the past, we would dictate when the first and last outing would be for the year; now, if golfers want an outing in October, we will hold off," Walter says. "Agronomically, the earlier the better – typically late August or early September, but with the golf market hurting, we must accommodate golfers as much as possible."

"We start aerifying at 4 p.m. on Sunday after the last tee time, and then we finish on Monday," he adds. "We aerify twice a year, which allows the crew to work without interruption. We will let golfers know when we aerify. We let golfers choose – half the people



Blue Ash superintendent Dan Walter avoids scheduling spraying during the times most golfers are playing to help increase customer satisfaction.

will play, and others won't and will wait a week. Golfers appreciate us letting them know up front. We used to aerify Monday and Tuesday, but it was disruptive for two days, and we lost about \$12,000 in revenue."

Blue Ash used to aerify 20 acres of fairways with one machine, and it took two weeks. "We typically did two or three a week, but now we hire a company that has three machines to do all the fairways, and it takes them one day to clean up," Walter says. "It costs us \$2,500 to bring in the company. The extra revenue brought in from the golfers is more than enough to cover the cost. We save on the machinery and pay an operator to use it. However, it's good to have your own machinery for greens because you need more control and there is less acreage."

There have been a few complaints about mowing at Blue Ash, according to Walter, so he scheduled more people to work in the morning to get most of mowing done by 11 a.m.

"We purchased another mower, so instead of one guy taking all day, we have two guys that are able to stay ahead of the golfers," he says. "It's more efficient, and the golfers appreciate it."

A better experience

Extensive landscaping (i.e. annuals and perennials) is another important aspect of the course that Walter feels is important to help

retain golfers.

"I feel the golfers today (usually women) enjoy coming out and seeing the different flowers and landscaping, to compare to their homes," he says. "They will ask the horticulture staff questions and get tips on their home landscaping. I feel it gives them a pleasant experience and surrounds them with familiar sites that they're used to seeing at home."

Golf course maintenance equates to the pace of play, which is an issue for Blue Ash because of its narrow fairways, Walter says. The staff has been trying to space out play to make it more enjoyable.

"We took out 600 trees in four years to try and help golfers make it easier to play without taking away the integrity of the design," he says. "We limbed 200 trees. That made a huge difference because it impacted the golfer."

Additionally, four greens were rebuilt because they were too undulated and contributed to slow play, Walter says.

Walter also emphasizes that every dollar and every golfer counts at Blue Ash.

"We used to have the attitude of not caring about losing golfers, but we've lost golfers because of the economy, and now our attitude has changed." GCN

For more information about maintenance practices at Blue Ash Golf Course, call Dan Walter at 513-686-1290.

Pesticide update

by
ROB
THOMAS

Pesticides are an integral part of a golf course superintendent's turf management program. Application rates, tank mixing, regulations and disease resistance are a few of the issues superintendents deal with when it comes to working with pesticides. The following is an update of what's available in the pesticide market for the golf industry.

Wisdom Flowable and **Wisdom GC Granular** from Amvac Professional Products are tools that can provide broad-spectrum control of pests such as armyworms, bluegrass billbugs, chinch bugs, Japanese beetles and mole crickets. Bifenthrin, the active ingredient in both products, is a pyrethroid that delivers a rapid response to pests. Wisdom GC Granular can be applied through conventional spreaders with standardized settings. Wisdom Flowable is compatible with many agricultural chemicals and has good dispersion characteristics. For more information, visit www.amvac-chemical.com.

Shuttle from Arvesta delivers knockdown and residual control of twospotted spider mite and spruce spider mite by destroying damaging mites at every life stage, from eggs to adults. Shuttle features a unique active ingredient with no known cross-resistance, making it a choice for managing mite resistance. It's safe on predacious mites, honeybees and other beneficial species. Shuttle comes in a flowable formulation for easier handling and mixing.

Arena insecticide provides broad-spectrum control of soil-borne and surface-feeding insects under a wide range of growing conditions. It offers season-long control of white grubs, chinch bugs and webworms. Arena works in two ways to protect turf. When applied before or during the egg-laying activity of target pests, its active ingredient (clothianidin) immediately impacts the insect. Then it keeps working systemically to provide long-lasting residual control. For more information about Shuttle or Arena, visit www.arvesta.com.

Pendulum AquaCap herbicide from BASF Professional Turf uses micro-encapsulation technology and a water-based formulation for pre-emergent weed control and value. It offers reduced staining potential and has almost no odor. It's safe to use around a wide variety of nursery and landscape ornamentals.

Amdro Pro fire ant bait eliminates the queen and colony in as little as three to seven days. For more information, visit www.turffacts.com.

The dual action of **Allectus GC** from Bayer Environmental Science prevents the flow of impulses through an insect's individual nerve cells and stops flow between nerves. This rapid action helps control pests above and below the surface. Allectus provides 90-percent broad-spectrum insect control with minimal environmental impact. It's available in liquid and granular formulations for foliar and soil applications.

Chipco Choice insecticide has a new broadcast label for fire ants. Slit-applied Choice provides six months of mole cricket control after one application. Broadcast-applied Choice provides fire-ant control as long as one year. Both methods deliver the benefits of the active ingredient fipronil at low doses.

TopChoice insecticide is a fire ant product based on the active ingredient fipronil. One broadcast application of the low-dose granule provides 95 percent control of fire ants for as long as one year. TopChoice also controls mole crickets, fleas, ticks and nuisance ants.

Ceasefire treats fire ants by delivering the active ingredient fipronil in a low-dose granular bait. It's designed for use in hard-to-reach areas such as landscape beds, parking lot islands and areas near water. For more information, visit www.bayer.com.

Endorse turf fungicide from Cleary Chemical Corp. provides control of anthracnose, brown patch, gray snow mold and yellow patch. Endorse obstructs the production of chitin found in fungal cell walls while inhibiting spore germination and mycelium growth in the turf plant. It attacks turf disease through foliar and translaminar systemic activity and can be used in a preventative or curative management program.

With its multisite activity and broad-spec-



Superintendents are looking for broad-spectrum control of various turfgrass pests, which can negatively impact golf courses.

Photo: Terry Buchen



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See GCBAA at the "Building of the Green" at the Golf Industry Show in Orlando.





Photo: Terry Buchen

With many communities closely bordering golf courses, pesticides with minimal odor are popular.

trum control, **Protect DF** works for warm- and cool-weather diseases such as rapid blight, Bermuda decline and summer stress syndrome. It also handles diseases such as leaf spot and brown patch. For more information about Endorse and Protect DF, visit www.clearychemical.com.

Mach 2 insecticide from Dow AgroScience offers a wide application window when applied as a preventative treat-

ment prior to egg hatch through the second instar. It doesn't require immediate irrigation after application. Its granular and on-fertilizer formulations are labeled for use on golf courses, as are its liquid formulations. It controls grubs at the labeled rate of two pounds active ingredient per acre.

Confront is a non-phenoxy, post-emergence herbicide with low odor that controls as many as 35 species of broadleaf weeds. It provides broad-spectrum weed control with one application, saving the product and labor costs of repeat treatments. It's labeled for use on most established cool- and warm-season turfgrasses, including bahiagrass, bentgrass, Bermudagrass, Kentucky bluegrass, Kentucky centipedegrass, creeping red fescue, chewing fescue, fescue, ryegrass and zoysiagrass.

Eagle 20EW specialty fungicide provides control of dollar spot and brown patch and is labeled for use on major turf varieties and landscape ornamentals. Its liquid formulation prevents and treats dollar spot, anthracnose, summer patch, brown patch, powdery mildew, rust and scab. Intended for use on fairways, roughs, tees, greens and other landscape ornamentals. Its best control of labeled diseases is when it's applied on a seven- to 10-day application schedule. For more information about the products, visit www.dowagro.com.

Kincaid offers **Terraneb SP** flowable and **Terraneb SP (WP)** turf and ornamental fungicides. **Terraneb SP** is designed to control gray snow mold, pythium, sclerotium and brown patch.

A line of insecticides in micro-injection treatments by **Mauget** is an environmentally friendly way to apply pesticides. The patented closed system means the chemical is completely contained within the tree, eliminating fears of drift. Only pests feeding on the tree are directly affected. This allows one to treat trees in diverse weather conditions such as wind or rain or in locations near pools, busy streets or schoolyards. A few of the products are **Imcide**, which contains imidacloprid; **Abacide**, which contains abamectin; **Inject-a-Cide**, which contains Metasystox-R; and **Inject-a-Cide "B,"** which contains Bidrin. For more information, visit www.mauget.com.

Certainty Turf herbicide from Monsanto selectively controls weeds in golf courses, commercial and residential turf. It's been registered by the U.S. Environmental Protection Agency. State approvals for **Certainty** are pending. The herbicide provides control of purple and yellow nutsedge, as well as control of green kyllinga. It can be used in most warm-season turfgrasses, and unlike many other herbicides, it's labeled for post-directed sprays around woody ornamentals. It also solves nutsedge and other weed problems in golf course fairways and roughs. For more information, visit www.monsanto.com.

Magellan is a systemic fungicide from Nufarm Turf and Specialty that's used against pythium and yellow tuft diseases. It's labeled for use on golf courses, lawns, municipal turf areas and sod farms. The clear liquid, with a neutral pH formulation, can be combined with other fungicides such as chlorothalonil for broad-spectrum programs. There's no known resistance to the active ingredient. It provides as many as 21 days of pythium protection at 8.20 pints per acre. For more information, visit www.turf.us.nufarm.com.

Bionx is an EPA-registered fungicide and insecticide from **Parkway Research** and functions best when used as a component of a disease- and pest-control plan. As a fungicide, **Bionx** wets the protective membrane of the fungal mycelia, sporangia and spores, breaking them down and exposing them to the drying effect of the atmosphere. Drying of the fungal mycelia and the surrounding leaf tissue will prevent further infection. **Bionx** has stand-alone activity on turf fun-



Photo: Terry Buchen

The rising costs of maintaining golf courses have led to the need for pesticides that provide long-lasting effectiveness.

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*source: USDA

gal diseases such as anthracnose, dollar spot and fairy ring. It's approved for control of downy mildew and powdery mildew on many outdoor plants and has activity on insects such as whiteflies, aphids, mealy bugs and leafhoppers, as well as various type of mites. For more information, visit www.parkwayresearch.com.

Azatrol EC from PBI-Gordon controls a broad spectrum of insects with its active ingredient, the azadirachtin molecule, which makes it almost impossible for insect resistance to develop. Low odor, good environmental characteristics and low mammalian toxicity combine with the control of more than 43 pests including armyworms, cutworms, gypsy moth larvae, striped beetles and whiteflies. For more information, visit www.pbigordon.com.

Pegasus and **Pegasus DF** from Phoenix Environmental Care are formulations of chlorothalonil and are labeled for a broad spectrum of fungal diseases in turf and ornamentals. Both products offer control of dollar spot, brown patch, leaf spot and stem rust. Pegasus has a flowable formulation that provides foliage coverage and tenacity under adverse conditions. Pegasus DF is a dry flowable with dispersion and suspension characteristics. For more information, visit www.phoenixenvcare.com.

SysStar from Regal Chemical Co. is a systemic combination fungicide for prevention and control of many diseases including fairy ring, anthracnose, brown patch, patch diseases and dollar spot.

Regal DeltaGard with fertilizer is a pyrethroid insecticide for controlling worms, fire ants, mole crickets, mites and other surface-feeding insects. It's available as a spray, granular and in combination with Regal fertilizer.

RegalStar II is a pre-emergent herbicide for turfgrass with season-long pre-emergent control of crowfoot, goosegrass, crabgrass and most other annual weeds from single application. For more information, visit www.regalchem.com.

Junction, a combination of two chemistries combined to create a broad-spectrum fungicide/bactericide, is a high-quality, dry, flowable formulation from SePro Turf and Ornamental that provides solution to disease control in a wide array of turf diseases. It's formulated to control algae, rhizoctonia brown patch and dollar spot.

Pentathlon is a broad-spectrum fungicide for effective control of fungal diseases on turfgrasses. It controls brown patch, dollar spot, melting out and leaf spot. For more information, visit www.sepro.com.

Best herbicide combinations from Simplot Turf and Horticulture offer fertilization and weed control in one pass. **Best 12-8-16 Mini** with 0.4 percent Barricade is a selective pre-emergent herbicide, which will control crabgrass, common annual grasses and selected broadleaf weeds in established turf. Barricade provides season-long control of crabgrass with one application.

Best 12-8-16 with 0.20 percent Dimension, a mini-pellet N-P-K fertilizer/herbicide combination, is offered in three different formulations to best meet the needs of different soil. Dimension prevents crabgrass, goosegrass, an-

nual bluegrass, spurge, purslane, oxalis and other annual grasses and broadleaf weeds found in turf and landscape ornamentals. Dimension also controls crabgrass postemergence up to the four-leaf stage. For more information, visit www.simplot.com.

Echo Ultimate is a fungicide from Sipcam Agro USA for the turf and ornamental fungicide market. It's the newest in the Echo brand series of chlorothalonil products. This 82.5-percent, spray-dried, water-dispersible granule product readily suspends in water, even under difficult conditions. It also resuspends in water easily after moderate settling.

Tenacity 1.3ME turf and ornamental fungicide is a new broad-spectrum, systemic fungicide containing long-residual propiconazole. It controls more than 15 turfgrass diseases including dollar spot, brown patch and anthracnose. Tenacity 1.3ME is a microemulsion concentrate liquid formulation labeled for a wide range of ornamental disease problems. It can be tank mixed with Echo brand chlorothalonil fungicides. For more information, visit www.sipcamagrousa.com.

The smaller, microemulsion-sized particles of **Heritage TL** from Syngenta Professional Products provide quick foliar intake and root uptake, resulting in faster protection against disease. The liquid formulation of Heritage fungicide offers long-lasting, broad-spectrum control and a negligible odor. Results of university studies show that Heritage TL delivers a potential increase in efficacy of as much as 15 percent against selected diseases like anthracnose. It also is effective against root-borne diseases such as summer patch and take-all patch due to its ability to be taken up by the roots and translocated up the inside of the plant. For more information, visit www.syngentaprofessionalproducts.com.

Orthene Turf, Tree & Ornamental Spray 97 from Valent U.S.A. has a patented 97 percent pellet formulation and zipper-lock resealable plastic bag that means no dust, lower odor and more accurate measuring. It offers control of mole crickets, fire ants, chinch bugs and worms with no special equipment required.

Orthene Turf, Tree & Ornamental Spray delivers economical, broad-spectrum control of mole crickets, fire ants, chinch bugs, worms and other turf pests without special equipment. Water soluble packets make handling and measuring easy. Both products allow golfers to resume play as soon as the spray dries. For more information, visit www.valent.com. GCN



Brown patch and dollar spot, common problems on golf courses throughout the country, are addressed by several fungicides.

Photo: Terry Buchen

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Terry Buchen, CGCS, MG, is president of Golf Agronomy International. He's a 35-year member of the GCSAA and can be reached at terrybuchen@earthlink.net.

Globetrotting consulting agronomist Terry Buchen visits many golf courses annually with his digital camera in-hand. He will share helpful ideas relating to maintenance equipment from the golf course superintendents he visits – as well as a few ideas of his own – with timely photos and captions that explore the changing world of golf course management.

A 3-inch-diameter portable trash pump (right) is used often during and after heavy rainfalls throughout the growing season in the upper Midwest. To make it easier to transport around a course, the shop manager fabricated and built a pump trailer with efficiency in mind.

One-inch square tubing and 1-inch angle iron were welded together and used for the pump trailer, which was designed a little larger than required so a larger pump could be used. The pump is mounted on the trailer framework using rubber-mounted automotive shock bushings to reduce vibration caused by the engine. The tongue is made from 1-inch-square tubing that's about 36-inches long. A clevis pin is used to attach a smaller turf vehicle's trailer hitch. The tongue can be lengthened when using medium and larger turf vehicles. Six-inch-diameter steel wheels with "non-highway-service" lawn-and-garden tires and $\frac{3}{4}$ -inch-diameter bearing hub assemblies mounted on $\frac{3}{4}$ -inch-diameter cold-rolled steel axles were acquired from a distributor.

The platform mounted on top of the framework is distressed steel. A 20-foot-long suction hose and a 50-foot-long discharge hose – all with quick-connects – are rolled up and placed on the back of the platform for easy transport. The front of the platform has a 16-gallon fishing-boat fuel tank with a replaceable fuel filter and a shut-off valve mounted to it. The tank allows the trash pump to operate about 20 continuous hours compared with the fuel tank that came as standard equipment with the pump that would have to be refueled every 1.5 hours. This allows the pump



to operate overnight without having to be refueled. The fuel gauge that came with the larger fuel tank is inoperable and a replacement isn't available because it's not manufactured anymore, so consideration is being made to add a gas cap with a built-in fuel gauge.

Greg Ellis, certified golf course superintendent, and Scott Brock, shop manager, at the Berrien Hills Country Club in St. Joseph, Mich., worked together on this novel idea.



A 2- or 3-inch-diameter diaphragm pump is used extensively for pumping water out of bunkers quickly and easily.

The black framework (left) came with the diaphragm pump when it was purchased and mounted on the trailer, which was fabricated using 1.5-inch angle iron about $\frac{1}{16}$ -inch thick welded together. A 5-foot-long piece of 1.5-inch-square tubing was used for the tongue, which extends to the back of the trailer. The front portion is 42-inches long to the end of the hitch. The tongue-mounted hitch was made out of 1.5-inch flat stock steel welded together that's $\frac{3}{16}$ -inch thick. It has a permanently mounted $\frac{3}{8}$ -inch-diameter clevis pin and a $\frac{1}{2}$ -inch-diameter "T" handle with a $\frac{1}{8}$ -inch-diameter roll pin that holds the spring in place so the clevis pin can't be removed or lost.

A jack stand was built using 2-inch-by-2-inch square steel stock $\frac{1}{8}$ -inch thick. A 1.5-inch square stock piece of steel $\frac{1}{8}$ -inch thick slides

up and down with the built-in handle, which has holes drilled into it for the up, transport, down and stationary positions. All that's needed is to pull the spring-loaded pin with the built-in handle that will find the correct hole by sliding the jack stand up or down.

Six-inch-diameter steel wheels with turf tires and $\frac{3}{4}$ -inch-diameter bearing hub assemblies were mounted to a $\frac{3}{4}$ -inch-diameter cold-rolled steel axle that has holes drilled for cotter pins to hold the wheels in place. The 2-inch-diameter diaphragm pump uses a 20-foot-long suction hose and 15- to 50-foot-long discharge hoses with quick-connects. The 3-inch-diameter pumps use a 15-foot-long suction hose and 15- to 50-foot-long discharge hoses with quick-connects. All hoses are transported in the bed of the transport turf vehicle.

John Gosselin, assistant general manager; Tristan Engle, golf course superintendent; and Jerry Thompson, site mechanic, at The DuPont Country Club in Wilmington, Del., thought of the pump trailer ideas. GCN