

BRIEFS



**TURF COUNCIL GETS NEW LOOK**

The decades-old Southern California Turfgrass Council, with its 700 members, is enjoying a new look as well as an ambitious vision for the future, according to Council President Mark Hodnick. Central to the council's identity facelift is an undertaking by Uber Advertising & Public Relations, which has crafted a marketing and promotion package for the Turfgrass Council as well as for the organization's annual trade show in October.

**ARIZONA SUPERS GIVE TO RESEARCH**

A \$2,500 donation for research was made to Dr. David M. Kopec of the University of Arizona by Bill Walsh, vice president of Cactus & Pine GCSA, at the U.S. Golf Association Green Section Seminar at Moon Valley Country Club on April 3. Kopec accepted the gift to be used to further research at the UA turfgrass facility. It came from the proceeds of The Cactus & Pine GCSA tournaments.



**GCSAA MEMBERSHIP RANKS SWELL**

LAWRENCE, Kan. — The Golf Course Superintendents Association of America (GCSAA) has pushed its membership total over 18,000, according to its chapter/member services department. In the three-month period from March 1 to May 31, membership increased by 1,000, or 5.9 percent. The association last year passed regulations under which new members of chapters must join the national group, and chapters' officers must all be GCSAA members in order for the chapters to retain their affiliation.

**VALDOSTA CC SIGNS IGM**

VALDOSTA, Ga. — Valdosta Country Club has retained International Golf Management, Inc. of Lakeland, Fla., to provide maintenance services. This marks IGM's first major contract in Georgia, one of several states included under the umbrella of IGM's Atlanta-based Southeast Atlantic region.

**HORTWORLD ON INTERNET**

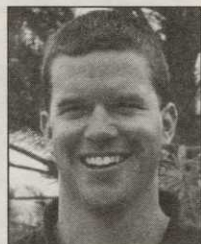
On June 2, Betrock Information Systems began to market HortWorld, a new horticultural site on the internet. HortWorld's site — [www.hortworld.com](http://www.hortworld.com) — explores a network of four distinct pathways: products & supplies, services & information, research & education, and turfgrass industry.

# Junk food for turfgrass? McCue serves up a batch

By MARK LESLIE

CASTLE ROCK, Colo. — The chef at the Country Club at Castle Pines may think superintendent Sean McCue is baking a batch of cookies with all the molasses he's buying but, in fact, he's heating up a meal that is producing healthy turfgrass and saving money.

For the past year McCue has been spraying his greens and fairways with a concoction of molasses and cane sugar, along with iron and a kelp product. "It's our own roots mix, if you will," McCue said. "It's a quick carbohydrate source — basically a junk food for grass. It heats it up and gives it a quick flush."



Sean McCue

The effect is very noticeable and almost immediate. "You notice it on greens in particular," McCue said. "The day before you spray, you might get a third of a basket of grass clippings. The next morning, after you spray, you get a full basket."

Besides the quick flush, the application improves grass color and increases its rooting mass, he said.

"We use this mixture to help break the greens out of dormancy without using N [nitrogen]," McCue said. "We use TGR, a plant growth regulator, for poa annua control in the fall. With TGR, you get a straw-colored discoloration in the spring."

"It's a substitute for a roots product. You try to generate some growth without adding nitrogen."

In 1996 McCue applied the molasses mixture every two weeks from April through late-September on this course which pushes through 26,000 rounds in a seven-month season.

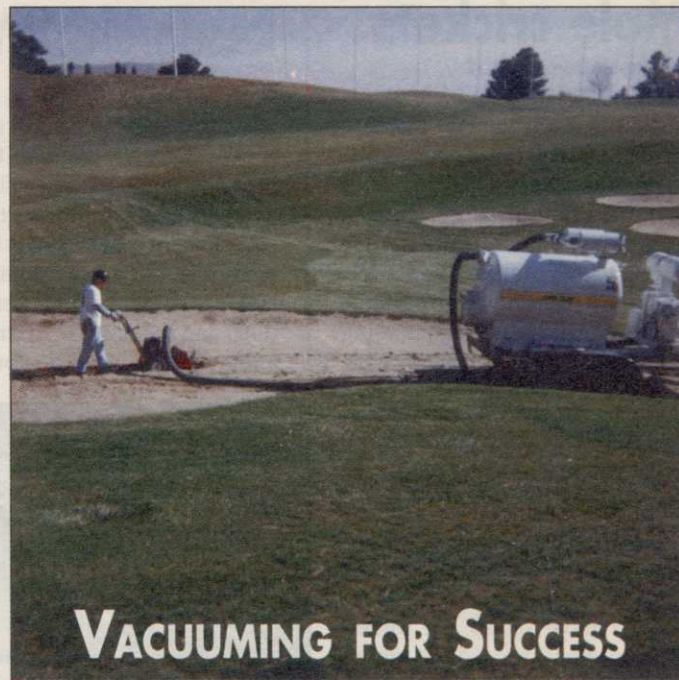
His crew generally adds nitrogen in a separate application. Sticking to a philosophy of keeping things lean, last year McCue applied 1.7 pounds of nitrogen the entire growing season.

"On the greens we put down .38 pounds of N last April 18," McCue said. "By supplementing with all these other sources of food, we were able to go without fertilizing again until July 29."

He said his molasses mixture costs about one-half the price of over-the-counter roots products.

Where does McCue buy such large amounts of molasses and sugar cane?

"Our chef orders it for me," he said. "I buy it by the gallon — 20 gallons at a time. He thinks I'm making cookies down here."



## VACUUMING FOR SUCCESS

# Hoover, move over, say Colorado superintendents

By MARK LESLIE

CASTLE PINES, Colo. — Colorado superintendents are praising a new machine that removes sand from bunkers without damaging the subsurface and does it twice as fast as other methods.

"The great thing is, after you get done you haven't disturbed the subsurface of the bunker," said Marshall Fearing, superintendent at Castle Pines Golf Club here.

"It's not damaging any turf. It's pretty slick," said superintendent Alan Ogren, who was just finishing work on the first of 32 traps he intended to refurbish at Snowmass Golf Course in Snowmass Village.

Custom-made for Hall-Irwin by a company that manufactures a huge vacuum for cleaning up during water-line excavation, the machine includes a 4-inch suction hose fastened to the expulsion chute of a snowblower. As the operator walks the snowblower back and forth in the trap,

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# Mole cricket challenge continues

By RICK BRANDENBURG

Although managing mole crickets on golf courses is a chore reserved primarily for superintendents in the Southeast, this pest has spread northward, with an occasional report in Virginia and moved west into Texas. Many of the lessons learned while trying to manage this pest in the South have implications that can improve control of other pests such as white grubs anywhere in the United States.

Like white grubs, mole crickets are a soil insect. They feed primarily on turfgrass roots and can be quite damaging. The fact that they are soil insects challenges us in two ways. First, it is difficult to get a good picture of exactly what the insect is doing below the soil surface. This keeps us guessing as to

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Rick L. Brandenburg is a turf entomologist at North Carolina State University.



Equipment to apply pesticides below the soil surface has been developed and has shown modest success in enhancing mole cricket control.

## Research sheds light on control

Under certain conditions, higher rates of some products will actually perform poorly as compared to lower rates. Poor control is often associated with the behavior of the mole cricket and its ability to avoid pesticides.

Following proper rate recommendations, rechecking application equipment calibration, directing control efforts against the small crickets, and avoiding treatment under extreme weather conditions help avoid these failures. Irrigation also influences control and this area is still under study because the response to irrigation is somewhat dependent

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COMMENTARY

## A look at turf: '60 to the future

By MICHAEL HURDZAN

Golf was just starting to boom around 1960, and turfgrass management was becoming a recognized curriculum at the Ohio State University. When I entered that program in 1961, there was one real turfgrass specialist — Dr. Bob Miller — but most of what other professors taught was based on pasture agriculture.

Life was pretty simple, with only a few turfgrasses (Merion, Windsor and Penncross were the high-tech cultivars). Automatic tee and green irrigation was in its infancy with electro-mechanical clocks, and fairways were watered using quick couplers. And the testing for sand-soil-peat for root zones was to mix some up in a bucket, look at it and run your

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## Mole crickets

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their abundance and life stage, until it is often too late to effectively control them. Secondly, their subterranean nature makes it more difficult to get control strategies, like insecticide, in contact with the pest.

A few recent findings on mole crickets are useful for managing this and other soil insect pests. While mole crickets still very much challenge us and the cost of control is quite high, the future looks bright for improving our success.

The first key to mole cricket management is scouting and monitoring. Since the pest spends most of its life underground, good records of where it occurs each year and when its eggs hatch are critical to success. The cricket is easiest to control when it is small. However, this usually occurs in April through July when the Bermuda grass is green and growing rapidly and no surface damage is visible. Effective management requires application of control measures at this time.

Detection of egg hatch is best accomplished by using a soapy water flush. This consists of applying a mixture of two gallons of water and two tablespoons of liquid dishwashing detergent to an area of approximately one square yard. Any small crickets within this area will come to the surface within a few minutes.

Weekly soap flushes in the late spring and early summer allow the superintendent to keep track of the initiation of egg hatch. The task of monitoring egg hatch may seem overwhelming in light of the acres to be covered. However, scouting for adult damage in the early spring and monitoring damage from crickets in past years can develop a map of "hot spots" where crickets are most likely to occur. Treatments should be applied soon after peak egg hatch.

Recent research has helped researchers understand why pesticides don't always work as well as hoped. First, mole cricket development varies from one year to the next. Simply treating based upon a calendar date will lead to disappointment.

Another factor is that mole crickets have a remarkable ability to detect and avoid insecticide applications. Under certain conditions they go deep in the soil and avoid the insecticide for a week or longer.

Irrigation also plays an important role in mole cricket control, but it is not as straightforward as simply irrigating following insecticide application.

During the past 10 years, many companies have produced a wide array of pesticide application

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## Research: 'More' is not always 'better' with chemical applications

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upon the specific product in use.

We naturally assume that watering the insecticide into the soil will increase its effectiveness against an insect that lives in the soil. Recent research has indicated that the picture is much more complicated than this and the use of pre- and post-treatment irrigations and the amount of irrigation can make a big difference in the control.

Research has demonstrated that subsurface application equipment, as a rule, improves performance of many insecticides. But, we have not always seen significantly improved control, nor always the reduced rates working as well. One must look carefully at the wide range of equipment available and consider cost versus benefit before leaping into subsurface application.

The production of biological control prod-

ucts has made great strides in recent years. Several companies have successfully produced commercial quantities of the spores of *Beauveria bassiana* and it is now available for turfgrass insect management, including mole crickets. These products have not been extensively tested in the field, but numerous trials are underway this year to further determine their fit in mole cricket management programs.



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## Buyers alliance reports continuing growth

WATERLOO, Iowa — VGM Golf, Inc., a buying alliance for golf course superintendents and others in the green industry, has added 22 new participating manufacturers.

Signing on with the Waterloo, Iowa-based company are the Adam Dean Group, Antigua, Black Rock, Burlington Golf, Bushnell, C.L.K. & Associates, Canterbury Belts, Capitol Cigar, Cobra Eyewear, Dann Dee Displays, DME

Rangefinders, Florsheim Shoes, Gold Eagle, Golfers Gallery, Maxfli, Miller Sports, Mobile Pro Shop, Pickseed West, Pro Shot Golf, Real Golf Vacations, Signature Concepts and Sport Haley.

VGM Golf now has 85 participating manufacturers who offer its more than 900 members competitive pricing, as well as programs that may include improved terms, lower minimums, extended dating, cash rebates and/or freight discounts.

## EPIC offers 4th super's training video in Spanish

WEST BEND, Wis — EPIC of Wisconsin, Inc. has released "Safety Basics on the Golf Course," the fourth in a series of Spanish versions of the "Superintendent's Video Workshop."

The 26-minute video promotes and stresses personal responsibility for a person's safety, using examples from the maintenance facility, on the

course and with power equipment.

Other Spanish videos are "Greens Mowing Tips & Operation," "The Knowledgeable Operator I" (for ride-on equipment) and "This Is a Golf Course."

More information is available from EPIC of Wisconsin, Inc., 600 East Progress Dr., West Bend, Wis., USA 53095; telephone 414-338-3700.



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## Mole Crickets

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equipment designed to place the pesticide below the soil surface. This equipment is now commonly available for use with granular and liquid pesticide formulations. The advantages of this equipment are reduced surface residue of pesticides, less chance of drift and runoff, possibly increased effectiveness, and lower rates of pesticides.

Meanwhile, the most exciting research may be in seeking biological methods to add to our arsenal for managing mole crickets. Using the red-eyed fly as a cricket parasite in Florida has shown success and recently we put a lot of hope in the commercial production and use of insect parasitic nematodes. While the level of control experienced from these nematode products was modest, they provided superintendents with an option to conventional pesticides, which was particularly useful in environmentally sensitive areas.

However, the economics and frustrations of commercial production, as well as the limited range of conditions for maximum effectiveness, have seriously limited development of biological control.

More recently, there has been renewed interest in commercial development of the naturally occurring fungal pathogen of insects called *Beauveria bassiana*.

Conventional pesticides have also made significant advances in mole cricket management. Chipco Choice is available through custom application and has proven quite successful. Numerous new pyrethroid insecticides with low mammalian toxicities and low use rates, such as Talstar and Scimitar, are also finding use. Products such as Merit, given "reduced risk" status during registration by the federal Environmental Protection Agency, are also being used more commonly to battle this pest.

Our research continues, with more effort being spent on understanding how the mole cricket's behavior permits it to escape much of our control efforts and under what conditions this behavior is most effective. Gaining better insight into the adaptive skills of this pest is the ultimate secret to more effective management.

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