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.

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 25,000 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.”

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 soil insects. They feed primarily on turfgrass roots and can be very 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 how 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 on turfgrass species and conditions.

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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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Briddle borrowed vacuum idea from water-line equipment

By MARK LESLIE

GREELEY, Colo. — The mother of invention can sometimes be someone else’s invention. And that is how a new super-powered vacuum that removes sand from bunkers without disturbing the subsurface or edges entered the golf world. The invention was birthed when Tom Briddle, director of golf services at Hall-Irwin Cos. in Greeley, happened upon a street worksite in Las Vegas, Nev., where a crew was using a vacuum-type machine to suck big rocks out of a water-line trench.

"It enabled them to do a lot of water-line excavation and not destroy gas mains, electric lines, that sort of thing," said Briddle. "I saw that and immediately thought about sand traps."

Briddle contacted the manufacturer of the machine and work started on a version that could handle golf course bunkers. It needed to be lighter and have a longer hose, so that surrounding turf would not be damaged.

The initial bunker vacuum was too powerful for a man to hold on to. So Scott Masi of Hall-Irwin thought of using a snowblower whose weight could hold the hose in place.

"The snowblower is simply mechanical transport back and forth to hold the hose," Briddle said. "The snowblower kicks the sand loose with the auger whether it’s wet or dry. It works very well."

Briddle said Hall-Irwin expects a four- to five-month wait on its application for a patent.

The machine’s name?
"We don’t have one yet," Briddle said. "Got any ideas?"

Sand-trap vac

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The diesel motor-powered auger kicks up the sand through the hose to a hopper on a trailer that can be stationed 15 to 20 feet away.

"We just wanted to remove the sand, redo the faces and not mess with reshaping and regrading the subsurface," said Fearing, who refurbished about 20 bunkers during the winter and intends to do the rest next year.

"You can take the sand out of the trap without damaging the trap," said Tom Briddle, director of golf services at Hall-Irwin Construction Co. "After you get the sand out, if the superintendent wants to rebuild the trap or do the edges, he can do so without causing any damage.

“When we did the traps at Keystone Resort we used the backhoe, and that wrecked a lot of the edges. Prior to that, we did the Sheridan with a Bobcat, and that ripped the bottom apart.

The machine, as yet unnamed but with patent pending, "amazed us when we first tried it," Briddle said.

Superintendent Kevin Ross, waiting his turn at using the bunker vacuum at Country Club of the Rockies in Edmond, said his crews normally remove sand from small bunkers by hand shovel and larger ones using a mini-excavator. The excavator can complete three small bunkers in a day, or a large bunker in one or two days, he said.

Pearing said the savings in man-hours is "a tremendous amount of time. It was a real efficient way to redo a bunker. I would say we were able to accomplish this twice as fast."

While Castle Pines Golf Club re-did its bunkers during the winter when the course was closed, Fearing said that "especially in season, this is the way to go."

Subsurface damage is a key issue in bunker restoration, Fearing said. "One thing that happens with a big piece of equipment is, you destroy the subsurface and that’s just getting the sand out. Then you spend a lot of time putting it back."

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Inhouse sandblasting a money-saver

TIMONIUM, Md. — Superintendent Douglas W. Petersan of Baltimore Country Club recently remodeled the existing maintenance building structures and added a new maintenance shop, employee lunchroom, bathrooms, showers, fully equipped kitchen, reception area, irrigation/computer room, assistant's office and superintendent's office, keeping the Five Farms design theme throughout.

Petersan's philosophy has always been to do everything inhouse, whenever possible, to keep costs down and to further maintain quality control. One example is how he and his staff built their own sand-blasting unit in the maintenance building.

"We went down to Sears and purchased a sand-blasting unit for about $120," Petersan said. "We built the box with a clear plexiglas hinged lid and added some thick, elbow-length industrial black rubber gloves. The rubber gloves do a great job protecting employees from the sand particles' driving force, and the clear, see-through cover makes for an easy, user-friendly machine."

In the past, Petersan sent out metal objects to be sand-blasted, but many times the corners and other tight areas were not sand-blasted properly, or at all.

"Because we were not satisfied with the quality and cost, we built our own sand-blasters and are now able to sand blast cheaply and with great quality," Petersan said.

"Our stamped metal tee markers, in the shape of our BCC logo, were all sand-blasted inhouse last winter and look great. We periodically screen out any contaminants, such as paint chips, and we used about 200 pounds of sand for the complete operation."

The ceramic nozzles on the sand-blasters wear out from time to time and cost $3 to $4 apiece. Petersan plans to do one-third of his tee makers each year and will sand-blast greensmower frames as well.

Any heavy metal item can be sand-blasted successfully, being extra careful when using any lightweight metal such as aluminum or magnesium, Petersan said.

Sand-trap vac

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"Anybody who does renovation work should have these," Briddle said. "They have the same problem I had when we did Keystone."

Hall-Irwin's plan is to have a crew accompany its vacuum from course to course. Any decision on mass-production of the unit, Briddle said, will have to wait until the patent is approved — perhaps by late summer or fall.

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Once the sand is removed, another machine pours in new sand. The Vancouver-made Ty-crop machine, whose hopper holds 4 cubic yards "works very well," Fearing said. Dakota Peat of Grand Forks, N.D., is also making two machines called Turf Tenders 420 and 440, carrying 2 or 4 cubic yards of sand.

The sand is delivered from hopper to trap by a conveyor belt, getting the job done without damaging the edges of the bunker.