

shaved expenses and conservatively projected our revenues. A very conservative approach was taken because we want to stay on track and be in a positive cash flow position by the beginning of 1995.

As you can see, the association has taken a turn for the better. We now project a positive cash flow, surpluses, etc. Of course, any surplus would be reinvested in new or improved services for members.

What tremendous *commitment* by the people who have hung in there during trying times! Isn't it interesting that some people are with us throughout good times and bad? Others have been with us part of the time — depending on how well we're doing. And of course, some will never be with us no matter how well we do.

Commitment. We have had a lot of people who share a vision. They have influenced what has happened and everyone has appreciated what has happened. Thank you to those who have shown commitment to our association and our profession. Let's continue to work together to promote better and safer sports turf!

STMA Chapter News

The Southern California Chapter: STMA — Friday, May 8 makes the Southern California Chapter's "STMA Fun Night At The MURPH!" at San Diego Jack Murphy Stadium. Join in the opportunity to network and pick up practical tips, as well as have fun.

Attendees will gather at the East Tunnel at 3 p.m. sharp for a tour of the stadium and peek behind the scenes. Next, a panel of your peers from local schools, parks, and colleges will share problem-solving methods from "the trenches of real life" in these budget-squeezed times. Following that, the group will enjoy a buffet dinner and refreshments with a "sky box view" of batting practice and an evening game as the Colorado Rockies face the Padres.

There is a \$30 charge per person and a limit of 50 people in the sky box. Registration must be postmarked before April 27. Don't get shut out!

Send reservations to San Diego Jack Murphy Stadium c/o Steve Wightman, 9449 Friars Rd., San Diego, CA 92108 or call Steve at (619) 525-8272 for more information.

Other upcoming events include an August networking/learning/fun session at Dodger Stadium, which will include a

game between the Dodgers and Cubs, and the Southern California Institute that will be held October 12 at UCLA in Los Angeles. More details on these events will soon be announced.

For more information on the Southern California Chapter, contact Chris Bunnell, (619) 432-2421.

Iowa Sports Turf Managers Association — The Iowa Sports Turf Managers Association will hold a two-part workshop on Baseball/Softball Field Maintenance in Boone, IA, on Saturday, May 14.

The morning baseball session will take place at Memorial Park, 2000 Boone St. Featured presenter will be Mike Andresen from the Iowa Cubs. Mike will be assisted by Dale Roe, Iowa State University, and other ISTMA members. The tentative agenda is: 9:30 a.m. registration; 10 a.m. — Reshaping/Building the Pitching Mound; 11 a.m. — Proper Infield Preparation, including Dragging Tips; 11:30 a.m. — Prevention and Removal of Infield Lips; Noon — Drying Wet Grounds.

The afternoon softball session will take place at the Little League Complex, 200 West 2nd Street. Featured presenter will be Bill Antons of the Boone Community School District. Bill also we be assisted by

continued on page 30

PRODUCT SHOWCASE

New Medium-Size Topdresser



The new Bannerman Sport-Topper has a capacity of 1.5 cu. yd. (40.5 cu. ft.) and is hydraulically driven, either directly from tractor hydraulics or using tractor P.T.O. to power its own hydraulics operating the rolling floor and dispensing brush. Spreading width is 58" and depth of coverage can be precisely controlled from 1/16" to 1". The double-walled aluminum hopper is very sturdy but light and surface pressure when loaded is 8-10 psi. The treadless tires are mounted on compensating swing axles, ideally suited to fine-turf areas such as golf clubs. It's fast, accurate and very maneuverable.

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Multi-Ject Aerifiers



This photo shows the new Multi-Ject 400—one of three aerifiers recently introduced by Bannerman. One is a gas-powered, walk-behind unit with three options in tines — Coring Tines, SlitterTines and Aerway Shattertines. Next is the Multi-Ject 400 with the same options in tines, but ground-driven and towed or attached by 3 pt. hitch to a tractor. Next is the 6-ft. Super-Ject with options of Coring Tines, 7-inch SlitterTines or Aerway Shattertines. All tines are interchangeable and replaceable, but the big advantage for the user with this system is the ability to aerify all season along with virtually no stoppage of play. Ask us if we can arrange a demonstration in your area.

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Dale Roe and other ISTMA members. The tentative schedule is: 1:30 p.m. — Registration; 2 p.m. — Pitching Area and Home Plate Maintenance; 2:30 p.m. — Infield Preparation and Dragging Tips; 3:30 p.m. — Removal and Prevention of Hazards in the Field; and 4 p.m. — Drying Wet Grounds.

For further information on this meeting or to register, contact Bill Antons, Boone Community School District, 500 7th St., Boone, IA 50036. Phone (515) 433-0750. For information on the Iowa Chapter contact Gary Peterson, (515) 791-0765.

Midwest Chapter: STMA — The Midwest Chapter will hold an afternoon Sports Turf Workshop at the baseball stadium of the Cane County Event Center, Geneva, IL on May 24. Attendees will close the session with fun and fellowship as they watch the Cane County Cougars, a White Sox farm club, take on a worthy competitor in an evening game. Contact workshop coordinator Scott Phippen at (708) 883-8600 for more details on this event. For more information on the chapter, contact the Chapter Hotline, (708) 439-4727.

STMA Florida Chapter #1 — Scheduling conflicts have changed the May meeting plans of the South Florida Chapter. Contact John Mascaro or Ed Birch for up-to-date information.

Additional meetings are in the planning stages. A July meeting in the City of Pompano will feature aerification as the prime topic. An August 3 meeting at Floyd Hall Stadium will focus on fertilization and irrigation. This event will be hosted by Kathy Conner. Further details will be announced soon.

For more information on the South Florida Chapter, contact John Mascaro, (305) 938-7477 or Ed Birch, (305) 938-0217.

The New England Chapter: STMA — The New England Chapter is planning a Field Day for August 10 at Holy Cross College, Worcester, MA. Further details will soon be announced.

For information on the chapter, contact Mary Owen, University of Massachusetts (508) 892-0382.

Chesapeake Chapter: STMA — Special Reminder — The Chesapeake Chapter Field Day will be held from 8:30 a.m. to 4 p.m. on April 14 at Camden Yards. Another event "in the works" is a September Regional Workshop that will be held in conjunction with the national STMA.

Board meetings are held the first Tuesday of each month from 4 p.m. to 6 p.m. Members are invited to attend. The May 3, June 7, and July 5 board meetings will be held at Camden Yards.

For information on the chapter, contact The Chapter Hotline, (301) 865-0667.

The Heartland Chapter: STMA — Plans continue to develop the Heartland Chapter's first Sports Turf Field Day, scheduled for July 13 at the Heritage Park Sports Complex, Olathe, KS. Further details will be announced soon.

The Heartland Chapter Board will meet the first Wednesday of each month from 4 p.m. to 5 p.m. at Heritage Park Sports Complex. All members are invited to attend.

For more information on the chapter, contact Mark Diller, sports turf manager, Johnson County Parks and Recreation, (913) 782-7625 or Jack Schwarz, J.S. Sports Turf, Liberty, MO, (816) 792-2808 or (800) 344-8873.

The Minnesota Sports Turf Managers Association — The newly-formed Minnesota Sports Turf Managers Association continues to make progress. Those interested in finding out more about the chapter are urged to contact acting President Tom Rudburg, University of St. Thomas, St. Paul, (612) 962-6545; acting Vice President Mike McDonald, Bierman Athletic Complex, University of Minnesota, Minneapolis, (612) 625-6097; or acting Secretary/Treasurer Brian Deyak, St. Cloud Sports Center, St. Cloud, (612) 255-7223.

Colorado Chapter: STMA — For more information on the chapter or its future activities, contact Joe Adams, Greeley Parks and Recreation, (303) 350-9340.

CHEMICAL LOG

CONTROLLING WHITE GRUBS

White grubs are a common perennial pest of turf in all regions of the country. They are especially destructive in the Northeast and Midwest.

The cream-colored, C-shaped grubs are the larvae of more than 100 species of beetle, among them the Japanese beetle (*Popillia japonica*), the northern masked chafer (*Cyclocephala borealis*) and the southern masked chafer (*C. immaculata*). Although of different species, all white grubs behave alike and can therefore be controlled in similar ways.

Larvae overwinter in the soil at depths of up to 16 inches. In the spring, they migrate upward to feed on turfgrass roots for several weeks before pupating. Adults emerge after pupation and lay eggs in the soil. In three weeks, a new generation of white grubs hatches, feeds on roots until the onset of cold weather, and migrates down into the soil.

Symptoms of white grub infestation include patches of yellow or brown grass that can be pulled easily from the ground. Large sections of infested turf can be rolled back like a carpet. White grubs sometimes attract insect-eating birds, skunks, moles and other animals that cause further damage to grass as they dig through turf looking for a meal. Grub damage is most severe in the fall, when larval feeding, heat, and water stress are at their peak. Turf rarely recovers from high white grub infestations.

Solutions

White grub beetles prefer to lay eggs in soil that is constantly moist. Allowing the upper layer of soil to dry out before irrigating may discourage adults from laying eggs. Also, beetles prefer to lay eggs in turf that has been closely mowed, so raising mower heights may discourage oviposition as well.

The biological control milky spore disease (*Bacillus popilliae*) has been shown to control Japanese beetle larvae; however, the effectiveness of the bacteria is largely dependent upon soil temperature. It is less effective in the North where soil temperatures rarely exceed 70 degrees F. In areas where soil temperatures are low, Sevin® can control white grub populations effectively. The best time to apply the product is in late summer or early fall when young grubs are actively feeding on turf roots. In dry conditions, irrigate turf a couple of days before applying carbaryl to bring grubs closer to the soil surface.

Editor's Note: This concludes the three-part "Chemical Log" series on controlling insects. Technical Credit: Rhone-Poulenc, manufacturer of Sevin and Chipco products.