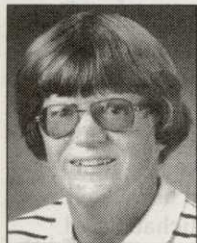


BRIEFS



METGCSA HONORS VITNUM

Dr. Patricia Vittum, program director of the Department of Entomology at the University of Massachusetts,



Dr. Pat Vittum

has been presented the Metropolitan Golf Course Superintendents Association's John Reid Lifetime Achievement Award. Co-author of the *IPM Handbook for Golf Courses*,

Vittum is well-known for research into the hyperodes weevil. An affiliate of the UMass Cooperative Extension Service, she has been the pesticide coordinator and state liaison representative for the National Agricultural Pesticide Impact Assessment Program for Massachusetts in the 1990s.

HAMILTON JOINS TWINEAGLES

NAPLES, Fla. — John Hamilton has joined the Nicklaus-designed TwinEagles Golf & Country Club as an agronomist. Hamilton has more than 20 years experience. Before joining TwinEagles, he operated a turfgrass consulting service for three years to international golf course clients in China and Guam, and also served as an agronomist with Golden Bear International.

MILLETT ASSUMES MET PRESIDENCY

WHITE PLAINS, N.Y. — Ridgeway Country Club superintendent Earl Millett has taken over the presidency of the Metropolitan Golf Course Superintendents Association (MetGCSA). A graduate of the University of Massachusetts' Stockbridge School of Agriculture, Millett has been involved in the MetGCSA for 21 years, the New York State Turfgrass Association, and the Tri-State Turf Research Foundation, on whose board he serves. He has been at Ridgeway since 1980.

FERTILIZER INSTITUTE ON THE WEB

Washington, D.C.—The Fertilizer Institute has launched its internet web site and they implemented a new logo. The site, located at www.tfi.org on the world wide web, will contain general information about fertilizer for the public as well as specialized news about association activities for TFI members.

"We view the new web site as a means of extending the lines of communication with our membership and the general public," said TFI President Gary D. Meyers.

Golf course 'living lab' Cal State Poly's aim

By DOUG SAUNDERS

POMONA, Calif. — Dealing with society's trash is an issue that draws little attention from the public until a landfill needs to be created or closed down. After operating a 200-acre landfill on campus property since 1957 in conjunction with the Los Angeles County Sanitation Districts, California State Polytechnic University here hopes to close the landfill and build an 18-hole golf course that will serve as a living laboratory.

The landfill has served two purposes over the last four decades. It has been a repository for the tons of refuse from the growing LA metropolis, and has served as an outdoor lab for waste

management, environmental sciences, engineering, and agriculture.

"The landfill has been very beneficial to the university from not only an economic standpoint, but also as an educational tool," said Ed Barnes, executive director of the Land Lab and Asset Development for Cal Poly Pomona.

At some point landfills do reach capacity and the next question was how to best close this one down. Strict EPA guidelines specify the closure procedures for landfills. The university has decided that, in conjunction with closure and monitoring regulations, creating a golf course can continue to provide economic and educational

benefits into the future.

"Our desire," Barnes said, "is to build an 18-hole course that will generate income through greens fees, provide a recreational outlet for students, be of value to our athletic program, and give more opportunities for internships for our colleges of hotel and restaurant management, turfgrass management, landscape architecture, and bio-sciences."

Cal Poly recently selected Golf Dimensions, a golf course management firm based in Irvine, to help the university through the project's planning and construction phases. Golf Dimensions recently completed the

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NEW ENGLAND TURF CONFERENCE

Wake up to soil acidity tests, Hummel tells superintendents

By MARK LESLIE

PROVIDENCE, R.I. — Decrying the fact that many of them have no idea how acidic their soil is, Dr. Norm Hummel called on turfgrass managers to establish soil-testing programs "to define the best fertilizer regimes" for their properties.

Speaking at the New England Regional Turfgrass Conference here on March 4, the former Cornell University professor said: "As basic as it is, it's amazing to me how many people don't have an idea of what the pH of their golf course or athletic field is at."

A soil test can address soil acidity and liming requirements, pH reduction, soil phosphorus and potassium, secondary nutrients like calcium and magnesium, and soluble salts for those in coastal areas, said Hummel, who now operates Hummel & Co. in Trumansburg, N.Y.

Calling pH "one of the most basic soil fertility aspects," Hummel said the optimum reading for most cool-season grasses is in a range of 6 to 7.

"One of the reasons is that optimum nutrient availability is found within that slightly acidic range," he said. "When you get into higher pHs, many of the micronutrients are there but tied up in unavailable forms. When you get much below that, nutrients

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Sunlight assessment, other tools taking turf care into 21st century

By MARK LESLIE

PROVIDENCE, R.I. — Sunlight assessment and digital imaging — two new technologies that are pulling golf superintendents into the computer age — will also help them deal with the difficult task of course renovations, according to a spokesman for the U.S. Golf Association Green Section.

"Frankly, most of the people here have the equipment and capabilities to operate this technology," Dave Oatis, director of the Northeast Region, told the New England Regional Turfgrass Conference here.

Oatis hailed the sunlight-assessment technology developed by Arbor Com Inc. of Toronto area. Company owner Scott Robinson, an arborist from Toronto, developed this tool "and it is mind boggling what they can do with it," Oatis said.

Oatis cited the usefulness of digital imaging as "limited only by your imagination."

"On difficult sites with difficult memberships, and for particularly important trees, you can use [sunlight assessment] to document and quantify how many and which trees need to be removed" to save shaded turfgrass, Oatis said. "You need eight hours of sunlight for healthy turf."

The position of the sun as it rises differs by approximately 22

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GOLF AND THE ENVIRONMENT



Aspetuck Valley Country Club in Weston, Conn., is home to alltypes of birds, waterfowl and other creatures.

Aspetuck Valley fulfills Audubon requirements

WESTON, Conn. — Aspetuck Valley Country Club has achieved designation as a Certified Audubon Cooperative Sanctuary by the Audubon Cooperative Sanctuary System (ACSS), the educational division of Audubon International.

"The membership is very proud that Aspetuck Valley is a Certified Audubon Cooperative Sanctuary golf course," said superintendent Steven Colangeli, who initiated the program at the club in 1996.

"It's a great feeling to know that a golf course can act as a recreation area for golf as well as a wildlife sanctuary. It's also nice to know that our daily maintenance practices and

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The policy game of golf

By RON DODSON

One of the major problems facing the golf industry today is whether governmental action is the most effective way to protect or restore the environment. Actually, it's a question of whether the public believes governmental action is the only way to protect or restore the environment. To golfers, superintendents and developers, this is an important question because governmental action impacts us all — individually and collectively.

Because the public's awareness of environmental issues and golf courses is at an all-time high, it's timely to take a

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Acidity tests

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such as phosphorus in particular are there but unavailable.

"Simply by 'liming' a low-pH soil, phosphorus becomes available and you see benefits in terms of rooting."

Hummel added that microbial activity is also increased simply by adding lime.

"When you have a pH of 5.2," he said, "microbiological activity is slow and you get a little thatch. Simply liming it, and bringing the pH up into the mid-6s, you increase the microbiological activity and, as a result, you are able to keep up with the organic accumulation so you get thatch decomposition. It demonstrates pretty clearly the importance of thatch on water movement into the soil."

Hummel suggested golf course and lawn-care managers purchase their own soil pH meters.

"We found that the inexpensive (\$50 or so) meters are actually pretty accurate," he said, recommending that the meter should have automatic temperature collection and a reference electrode. A kit to calibrate the meter should also be bought, he said.

Determining pH is simple, Hummel said. "Put a soil sample

in a cup, add water, let it sit a half hour and take the reading."

He listed liming guidelines:

- Apply in the fall or spring.
- Coordinate the application with core cultivation if possible "because lime neutralizes acidity where it is at. It does not move down into the soil. So anything you can do to get it down deeper, the better off you will be."

- Use a maximum of 50 pounds per 1,000 square feet on estab-

lished turf.

• If you have high pH soils, add elemental sulfur applications to lower the pH to slightly acidic.

While nitrogen is so dynamic in the soil that it is rarely tested for, Hummel did recommend "management factors" for phosphorus and potassium.

Phosphorus, he said, "is essential in establishment. And if you are in newly established field, a soil test is valuable to determine phosphorus levels.

"Established turf is unaffected by additional phosphorus because it has a very fibrous root system and obtains whatever phosphorus is there. Phosphorus is very immobile in soils. Its availability is very closely tied to pH."

Potassium content in turf, he said, is about half that of nitrogen.

Saying that secondary nutrients — calcium and magnesium — are important, Hummel added, "But in most native soils we rarely run into deficiencies."

Referring to the Cation Exchange Capacity (CEC), which defines the soil's ability to hold nutrients, Hummel said: "Sand and silt have little CEC. Most CEC in a soil is in clay or organic matter. So, add organic matter to a soil and it improves CEC."

Soil reports also divulge "percent base saturation," the ratio of basic cations in the soil — calcium, magnesium and potassium.

The recommended percentages of basic cations in soil, he said, are: potassium, 2-7 percent; calcium, 65-85 percent; magnesium, 10-20 percent; and hydrogen, 0-5 percent, when present.

He listed as calcium sources: calcidic limestone, 32 percent; dolomite limestone 22 percent; gypsum 19-23 percent; superphosphal fertilizers 12-21 percent; and natural organic fertilizers, like bone meal and some poultry manure products.

He recommended magnesium oxide as the best source for magnesium. "It's 33 percent magnesium and is a granular form that is easy to apply," he said, adding that other sources are dolomite lime, 12 percent; potassium magnesium sulfate, 11 percent; and magnesium sulfate, 9 percent.

"A soil test is only as good as you send in," Hummel said. "First, identify the different soil and turf areas. Then, collect a representative sample from each area. Use 10 to 20 subsamples using the top 2 inches of soil, excluding thatch. The depth of the sample should reflect the depth of rooting."

"Soil testing, though a widely used tool, can be misused or better used," he said, asking people to maximize their soil test programs by deciding on a reputable lab and staying with it; keeping accurate records; sampling to the same depth each time; and sampling at the same time of year.

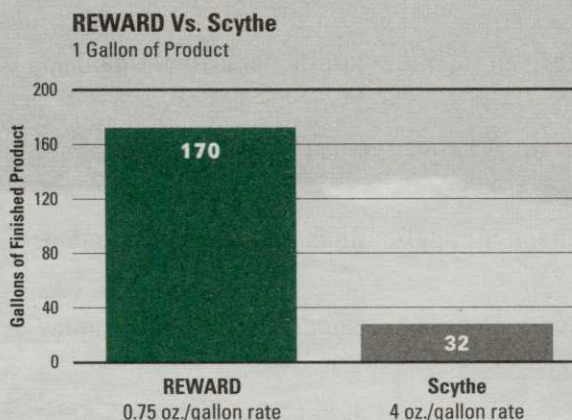
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