Course of Study

Siena College and Schuyler Meadows GC will cooperate on long-term environmental studies.

Off the Record

Having decided to rethink its greens construction specs, the USGA solicits research proposals.

15,000 and Counting!

GCN and the NGF have identified the nation's 15,000th course, which opened for play this spring.

Top dressing breakthrough: Crumb rubber

By MARK LESLIE

WILMINGTON, Ohio — After five years of extensive study, Michigan State University (MSU) researchers are recommending crumb rubber, or finely chopped automobile tires, as a top dressing for high-traffic areas on golf courses and athletic fields.

As much as we incorporated it into the soil profile, we never saw the panic that people wanted. But we did find great results when top dressing it onto established turf,” Dr. John "Trey" Rogers III of MSU said of crumb rubber.

“When we incorporated it, the rubber...”

Claims drain funding for UST clean-up

By PETER BLAIS

Nebraska recently delayed the clean-up of some 6,000 contaminated underground storage tank (UST) sites because its state-controlled cleanup fund is almost out of money. This spring, cash-strapped New Mexico diverted half the $14 million in its UST clean-up and indemnification fund to other uses.

Michigan declared its fund insolvent in April and went out of business for good June 29, forcing tank owners there to seek private insurance to meet the federal mandate of $1 million in liability coverage per incident.

State UST funds in Florida and Illinois could soon run out of money, according to Dennis Rounds, which argued the assessment was more than $3 million too high. However, the remaining 11 clubs have yet to have

 Taxing setback in Florida court

By HAL PHILLIPS

NAPLES, Fla. — A precedent-setting battle is brewing here in South Florida where 12 Collier County golf clubs have challenged their property assessments in court.

For the moment, golf industry fortunes are flagging. Judge Ted Broussard has upheld the municipal appraisal of Quail Creek Country Club in Naples, which argued the assessment was more than $3 million too high. However, the remaining 11 clubs have yet to have

Ever-shrinking dollar posing problems for manufacturers

By HAL PHILLIPS

America's ongoing currency woes are beginning to affect golf course industry firms, some of which have discarded product lines dependent on overseas manufacturing agreements. Others continue to monitor the situation closely, recognizing the possibility that plunging dollar values may render those agreements unfeasible in the long-term.

"Anybody importing from Japan any commodity is impacted by the currency situation," said John Brozek, director of industrial Product Sales at Daihatsu, which will cease production of its Hijet utility vehicle in December.

Like Daihatsu, Mitsubishi manufacturers its Mighty Mit utility vehicle in Japan, but that will soon end, confirmed Bob Hertel, industrial vehicle man...
Rubber as top dressing

Also, the rubber particles are much softer than sand, Rogers said in introducing the research results at a Lofts Seed Co. field day here in June.

"We're very impressed and encouraged by this. We're very confident [about using it] on athletic fields but cautious about golf courses," he added, suggesting that for now it be applied at the end of cart paths and exits off greens. "We have got some real potential. It protects the turf fibers. You can do it right on a parking lot and transfer it."

"Two people can pick up a sheet of this mat, even after it is watered," he added, "and you can sod an area very quickly."

Regarding possible toxicity from the rubber, Rogers said: "We haven't looked at all the compounds that come off the rubber. But as far as zinc, iron, manganese and copper are concerned, we've seen some increase in zinc and manganese but not in iron and copper. Even when we tilled rubber six inches into the soil, the soil levels were well below drinking standards, even after four years."

He said he was surprised to find the rubber does not cause heat problems. "In April, when the grass is low, it warms up the soil a little quicker. Later, when the turfgrass canopy is higher, it covers up the crumb rubber."

Asked about aerating and core-cultivating the rubber into the soil, Rogers said: "I think if you had an area that you couldn't grow grass in, and you wanted to seed it, you should core-cultivate it before seeding it anyway. I would do that, but still concentrate in having the majority of the rubber at the top. Don't put the rubber down until you are almost ready to put traffic on it."

Rogers dispelled any concern that too much rubber would work its way into the soil profile over a period of time. "We have not seen the rubber migrate down into the soil profile," he said. "Its particle density is around 1.1 — much less than the soil density, which is around 2.6."

"Finally, and most important for golfers, he said, the rubber doesn't affect hitting a golf ball."

MSU is receiving a use patent on crumb rubber. The university has granted licensing rights to a company which is calling the product Rebound Top Dressing. It can be reached at telephone 800-795-TIRE.