# Off The Fringe

## Business briefs

### Ohio Superintendents Tee-Off with Conference

The golf season officially arrived for Ohio superintendents in mid-March with the fourth-annual Ohio State Golf Turf Spring Tee-Off Conference in Columbus. They talked turf maintenance for two days at the conference, organized by Todd Voss, superintendent of the Double Eagle Club in Galena, Ohio. Many of the speakers were from Ohio State's turf department.

Jason Straka, a golf course architect with Hurdzan-Fry Golf Design, spoke about golf design with maintenance in mind. Straka pointed out a scary trend tied to his topic — that there's more money spent to design, build and maintain bunkers than there is to design, build and maintain putting greens.

Bob Brame, director of the United States Golf Association Green Section's North-Central Region, talked about the use of wetting agents when watering greens during a panel discussion on "Proper Watering Techniques."

"There is no question that there are a number of golf courses in the state and the region that wouldn't be able to keep up with dry spots if they didn't use wetting agents," Brame said.

That said, Brame warned superintendents to be careful when using wetting agents with applications of other products.

"Every year I see a half-dozen cases or more where there are certain issues, such as thinning or phytotoxicity, on greens that have some tie to applications that include wetting agents," Brame said. "I didn't say it was the wetting agent that caused the issue, but it combined with other certain products to create an issue."

Brame advised superintendents to test

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# Power Up

## UTILITY VEHICLE MANUFACTURERS ADDRESS CHALLENGES OF ALTERNATIVE FUELS

**By Anthony Pioppi, Contributing Editor**

Think of cutting-edge technology in the golf course maintenance world, and, well, cutting is exactly what comes to mind. Mowers that flex, reels that can be removed easily and blades that spin thanks to electric power are just a few innovations that have been at the forefront of technology for the better part of the last decade.

All the while, utility vehicles have rolled along with little major change to their overall design. It's true that electric power has grabbed a larger share of the market, and vehicle bodies are made of durable plastic, but there has not been a quantum leap as seen with mowers. It looks as if the pattern will hold true for at least the rest of the decade, according to the manufacturers.

If changes do come, they most likely will explore alternate fuel sources, but don't expect them to hit the marketplace anytime soon.

"I think you're seeing there has been experimentation with hydrogen technology," said Brad Aldridge, product manager for John Deere. "That's the one thing that's being looked at by everyone, but that's pretty far off."

Tim Koch, Toro's senior marketing manager of utility vehicles, agreed. "Alternative fuels is the No. 1 area," he said.

Biodiesel, hybrid electrics and hydrogen power are what manufacturers see as the logical steps.

Because the golf industry does not have a large enough presence to push the research, it will wait for another industry, such as automotive, to fuel the expansion, Koch says.

But manufacturers are helping to propel innovations already in place.

Toro has partnered with New York

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State to provide hydrogen-powered utility vehicles that will be used in an experimental capacity at Niagara Falls State Park, where a hydrogen refueling station is already in place. Hydrogen filling stations are rare, which makes adoption for this type of technology a slow process.

It's not cheap, either. Currently, alternative fuel technology is "cost prohibitive" for most superintendents, says Mike Packer, Club Car's vice president of worldwide sales and service. But that won't stop the company from improving its products. Club Car is looking at different battery cell technology while improving its electric vehicles. As with other manufacturers, the lifespan of batteries is a focal point.

It is possible that batteries that superintendents can afford will be to able power heavy-duty utility vehicles such as the Toro Workman and the John Deere Pro Gator in addition to light-duty vehicles. "Technologically, it can be done today. We have to figure out the economics," Koch said.

Brian Melka, the director of product management for Jacobsen, said a shift could be to lithium ion batteries; think cell phones, laptops and now power tools. There is also the possibility of nickel metal hydride batteries.

Biodiesel is also gaining popularity. Toro has utility vehicles that meet 2008 standards, but Melka said efficiency is an issue right now. "That's the challenge," he said.

Liquid propane is another alternative. Although it has made inroads in parts of Europe, it has not caught on here.

So for now and the near future, manufacturers of utility vehicles for the golf course market will continue to concentrate on fuel savings and noise reduction.

But in the long term, manufacturers envision the day when gas and possibly electric power will be energies of the past.

"Maybe not in five or 10 years, but by 20 years, we'll have a another technology come into play," Aldridge said. ■