**Point**

**Environmental attorney Neal Lewis and USGA agronomist Matt Nelson face off over organic golf.**

**Counterpoint**

**NGP, AGC merger to go forward**

Investors, analysts question combined company’s viability

**First National expands Native American lending**

**Mower makers shelve new technology**

By Andrew Overbeck

While mower manufacturers continue to develop GPS, electric motors and autonomous capabilities, they have not yet incorporated these technologies into any new products. Instead of testing the waters with risky and expensive technology, manufacturers have concentrated their short-term efforts on improving and tweaking existing products.

"A lot of the excitement over new technology was fed by the Internet euphoria that you could do anything," said John Wright, director of marketing for Toro. "A lot of companies have spent money trying to do anything and it didn't pay off. Superintendents have told us that they don't want more technology. They want stuff that works and makes their jobs easier — not more complicated."

Toro and other manufacturers have not given up on the promise of new technology (see story page 11), but they are cognizant that any breakthrough product will have to offer value for the price.

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Equipment selection process critical to effective operation

By KEVIN ROSS

One of the most important decisions a superintendent has to make in managing a golf course operation is proper equipment selection. Justification for purchasing expensive equipment, like mowers, must be matched to needs and budget.

How does one go about selecting the equipment needed? There are many different factors which go into this process. While superintendents will differ in their criteria of selection, some of the important factors include:

- Price - For many, price is the bottom line. Unfortunately, comparing equipment only by price can be very misleading. Two machines with different prices might look the same on the surface, but a closer look at the units will reveal differences, especially when it comes to components. For example, a less expensive machine might not have as good hydraulic motors as the more expensive machine.

- Service/Support - The ability of the company to back their equipment with service and support, whether it is parts, training, or updates is of extreme importance.

- Warranty - Most equipment warranties are very similar, however reading the fine print can reveal important differences. It is critical to investigate warranties because components such as hydraulic motors, drive engines and even tires can carry different warranties.

- Reliability/Track Record - There is no doubt that word of mouth in this industry can make or break a piece of equipment. A machine that has been rock-solid in the field has a major advantage because superintendents cannot afford down time.

- Serviceability - Having the equipment technician crawl all over a potential equipment can reveal many important issues that can make a difference. For example, by taking a closer look, mechanics can evaluate everything from how easy it is to get to the oil drain plug to how difficult it will be to change a fan or drive belt.

THE DEMO GAME

Another important factor in the decision-making process is the equipment demo. A one-week demo should be enough for a superintendent to see how it performs under their course conditions.

During the demo process, it is critical to get input from assistants, mechanics and seasonal staff. First have the technician do a total inspection and set-up. Make notes on advantages and disadvantages so when the next brand rolls in, comparison will be easier. Next, select the staff members that will be using this machine the most, and have the equipment technician perform the proper training. The unit should then be put to the test in all conditions (wet, dry, etc.) over different terrain (flat, hills, etc.).

When each demo is finished, have a brief meeting with the operators to discuss the machine's performance and make notes for future reference. After all machines have been evaluated, have a final meeting for staff input, and review the notes for each. Using the demo information with the aforementioned selection process factors, a superintendent can then evaluate their equipment selection with confidence in making the proper decision.

Electric, autonomous mowers still hold promise

While manufacturers are currently focusing on improving existing products, they are still evaluating the market for new technology.

All three companies are considering electric mowers. Textron's E-Plex greensmower is already on the market and John Deere is evaluating the potential of electric models.

John Deere's director of sales and marketing Greg Breningmeyer said the company is testing an electric model, but the main challenge remains coming up with a system that can give the superintendent all-day power.

"Replacing hydraulics and diesel-powered engines is something everyone would like to do," he said. "The problem is that current battery and fuel cell technology is insufficient to give a full day of power. In golf course applications electric motors are close to the ground and get splashed by fertilizer, so durability is an issue." John Deere's director of marketing, John Wright is skeptical about the size of the electric market. "The market is not there yet," he said. "This is not a big industry to begin with and if you can only sell 50 of something, the investment is not worth it."

Textron remains bullish on the future of electric products and has answered the power challenge with snap-out battery packs that it said could keep an

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Manufacturers tweak products

the same reliability, quality and value for price as models currently on the market.

"I don't think you could say we are moving away from new technology," Wright said. "It is just a matter of reading when the present value to the customer." Pat Shay, superintendent, Thousand Hills Golf Resort

"The single most important factor when purchasing mowers is the service. If you don't receive adequate service from the distributor no amount of savings will make up for this shortfall." Kevin Coolidge, superintendent, The Sportsman Golf Resort

JACOBSEN'S NEW LF 1880

Textron's new Jacobsen LF 1880 lightweight fairway mower features patented newfloating lift arms that allow for more vertical movement while keeping cutting units in the same plane. According to Jones, the new mower can handle more undulating surfaces while delivering the same quality of cut.

"It keeps the cutting units from spreading farther apart and leaving uncut grass," he said. "We will be adopting this technology to our rotary mower lines." The company also made minor improvements on its AR 2500, 9510 and 5111 rotary mowers.

TORO IMPROVES ROTARY MOWERS, ERGONOMICS

Toro also made improvements to its Greensmaster 4500- and 4700-D rotary mowers by adding cutting decks from the Greensmaster 3500 and the engine from the Reelmaster 6000 series.

"If you can use things that you have already developed or introduce fine-tuned products into the market, then your customers are not starting over with a new machine," said Wright. "The idea here is to have innovation with limited newness."

The company also improved ergonomics and operator comfort on its Greensmaster 3150 greens mower.

JOHN DEERE EXPANDS B-SERIES LINE

John Deere's new B-Series walk-behind greens mowers have also been improved for this year.

"We have made a good product better," said Breningmeyer. "We have made it easier to adjust the reels and to take them on and off. We also added a true 18-inch machine and a new 26-inch machine to the line. They are the lightest walk-behind greens mowers out there."

Breningmeyer said that a major new product is in the works for release next year, but gave no other details other than it would be "riding mower."