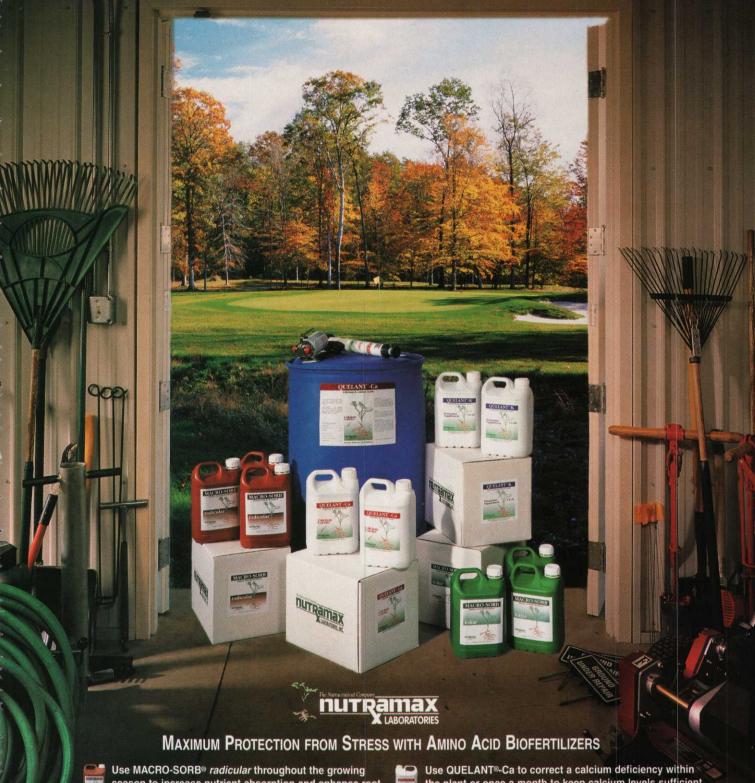
Tools of the Trade





season to increase nutrient absorption and enhance root growth and development.



the plant or once a month to keep calcium levels sufficient throughout the year.



Use MACRO-SORB® foliar to increase photosynthetic activity, especially during periods of stress, and throughout the year to enhance your foliar spray program.



Use QUELANT®-K to enhance synthesis of carbohydrates and increase turfgrass tolerance to heat, drought, cold, traffic, disease, and other adverse conditions.

Off The Fringe

briefs

Novartis, AstraZeneca join to launch Syngenta

Syngenta, the result of a proposed merger between Novartis AG and AstraZeneca PLC, will be the largest agrochemical business in the world when the deal is finalized. The company will push sales of nearly \$8 billion.

The managements of the Novartis and AstraZeneca divisions will lead the combined agrochemical company.

The Novartis-AstraZeneca move is likely to trigger further consolidation within the \$30 billion-a-year agrochemical industry, according to *The Wall Street Journal*.

Heinz Imhof, leader of the Novartis agrochemical division, will be named chairman of Syngenta and Michael Pragnell, AstraZeneca's agrochemical chief, will be CEO.

Deere loses money, but posts gain

Moline, III.—based Deere & Co. lost \$29.5 million in the fourth quarter, citing flagging demand for agricultural equipment.

Continued depression in commodity prices has cooled high-horsepower, high-margin agricultural equipment, according to the company. For the full year, Deere posted a profit of \$239.2 million.

Century acquires Legacy Golf

Madison Heights, Mich.-based Century Rain Aid acquired the Legacy Golf irrigation division of MPR Supply, a St. Louis-based distributor. Legacy is the golf irrigation division of Hunter Industries.

Golf Trust, Legends team up

Charleston, S.C.-based Golf Trust of America assigned four of its leases to Legends

Briefs continue on page 14

Fill 'er Up with Zinc

s there a mower powered by a fuel cell in your future? Could be.
Bloomington, Minn.-based Toro
Co. is developing a prototype greens mower to test the feasibility of a power source using zinc/air battery technology. Racine, Wis.-based Textron Turf Care And Specialty Products is investigating its use in utility vehicles.

The chief proponent of the zinc/air battery technology is Jeff Colborn, Ph.D., chairman and CEO of Metallic Power in Carlsbad, Calif. His system consists of zinc/air fuel cells and a zinc regeneration recycling "vending" machine. It combines zinc pellets (1 millimeter in diameter) with oxygen from the air, forming zinc oxide which reacts with an electrolyte inside the cell and releases electricity.

Colborn says his technology:

- Offers two- to three-times the energy of a lead/acid battery and, eventually, five- or six-times as much.
 - · Can be recharged in 10 minutes.
 - Is virtually silent so it

can be operated earlier in the morning and later in the evening.

- Has no hydraulics, so it's not subject to hydraulic leaks.
- Will offer more precise control of blade and reel speeds.

"Our commitments with Toro and Textron are to work together to produce prototypes," Colborn says. "Then the decision will be made on

going forward."

Toro is taking a wait-and-see attitude to its applications for golf course mowing equipment. "There's a need to electrify products for a number of reasons, not the least of which is the desire to reduce emissions in certain (geographic) areas," says Dana Long, Toro's director of advanced turf technology. "Also, you can make the products smarter and operate better by putting microprocessors on them."

The fuel cell technology developed by Metallic Power "looks promising," but don't expect to see fuel cell-powered turf equipment soon, Long says.

Golfers often complain about the maintenance practices of superintendents. Here's how they rate some of their most common complaints: Often/Sometimes Very/Somewhat **Problem A Problem For Me Bothersome** 67% 77% Recently Aerified Greens 63% 70% Golf Course Playing Surface Too Wet Golf Car Restrictions 43% 45% 42% Maintenance Workers On Course 37%

SOURCE: GCSAA, 1996; ILLUSTRATION: DAN BEEDY



Miniature Golf

ou got new socks and underwear. You got the Ricky Martin CD and a Chia Pet. Christmas has come and gone, and your stocking was stuffed with many cool things. But you feel like Santa forgot to deliver that perfect gift — the one to bring out the real and creative you.

Well, we've found it for you.

Introducing Links Design-A-Hole, a golf hole model kit that allows the shaping and creation of your dream link. Here's

your chance to emulate Donald Ross or create your version of Amen Corner

The model board is created from foam-like material. Bunkers, water features and other design elements can be created using the carving tool furnished with the kit. The finished product is nearly 1 foot long and 6 inches wide.

The toy for all ages is created by Larry Razzano, a (you guessed it) master model builder with a passion for golf.

It's available at www.linksdesignahole.com.

Y2K Problems or Bust?

So what in the name of the new millennium happened to your golf course at the stroke of midnight on New Year's Eve? Did your irrigation system sprout rain like a spring thunderstorm? Did the fairway on the 10th hole suddenly unfurl like Moses parting the Red Sea?

Golfdom wants to know if you and your golf course experienced any problems related to Y2K. We want to know if you took any safe-

guards to prevent any Y2K pains in the neck and if those precautions succeeded. We also want to know what you thought of all the hype surrounding what could have happened when we went from 1999 to 2000.

Please fax your comments to 440-891-2675 or e-mail them to laylward@advanstar.com.

We'll print them in the next issue of Golfdom.

Quotable

"I'm not a big fan of this millennium stuff. This is the last expo with a '19' in front of it."

— John Buechner, president of the New Jersey Turfgrass Association, during his opening remarks of the 1999 NJTA Expo in December.

"We tell owners, if you want the best greens, then hire the best superintendents you can find not afford."

— Mike Hurdzan, Hurdzan Fry Golf Course Design

"Grass doesn't commit suicide. If grass dies, we probably kill it."

— Stan Zontek, Director, Mid-Atlantic Region, Green Section, United States Golf Association

"A phenomenal woman."

— Greg Norman describing the late Winnie Palmer, who died in November from cancer.

"I don't like the Stimpmeter. I've been known to throw one or two into the woods."

— Matt Shaffer, superintendent of The Country Club in Pepper Pike, Ohio, on his disdain for measurement of green speeds.

"Golf is the best sport. The course can't be conquered. Even if you beat the guy you're playing with, you can't beat the course."

— Charles "Sparky" Schulz, who retired this month from doing the Peanuts comic strip he has done for nearly 50 years. We'll miss you, Sparky.

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Off The Fringe

briefs

Briefs continued from page 12 National Golf Management, including Tiburon GC in Nebraska, Persimmon Ridge in Kentucky, and Black Bear GC and Silverthorn CC in Florida.

Redixim moves headquarters

Redixim Charterhouse moved its North American headquarters from Kingston, Pa., to new, larger facilities in nearby Pittston Township.

ClubCorp acquires Nicklaus course

A joint-venture of Dallas-based ClubCorp and North Palm Beach, Fla.-based Golden Bear International acquired Laurel Springs GC in Suwanee, Ga., a Jack Nicklaus Signature Course. The joint venture was formed in July 1998 to build, own and operate Nicklaus Signature golf courses worldwide.

ClubCorp also acquired the Nicklausdesigned Lakelands GC in Queensland, Australia

Also, ClubCorp recently acquired the management contract for Palmilla, an oceanfront property on the Sea of Cortez in Los Cabos, Mexico. The resort is home to the Nicklaus-designed Palmilla GC.

Troon sells to real estate company

Whitehall Street Real Estate Limited Partnership XI, and affiliate of Goldman, Sachs & Co., purchased about one-third of Scottsdale, Ariz.-based Troon Golf. Whitehall is a \$2.2 billion equity fund formed to acquire real estate worldwide.

Griffin, Nation's Ag align

Valdosta, Ga.-based Griffin LLC and Knoxville, Tenn.-based Nation's Ag II LLC are forming an alliance for the development and marketing of chlorothalonil-based fungicide products.

Sybron, Milliken reach agreement

Spartanburg, S.C.-based Milliken Turf Products is now distributing Sybron Biochemicals products, including Green-Releaf by Sybron.

Griffin says to expect its new chlorothanid offerings to hit the market in late spring.

Wake-up Call

s a superintendent, you're a morning person — whether you like it or not. If you have been in the business long, you probably wake up before dawn without the aid of an alarm clock. Your wife probably loves you for it, even though she's not sure how you do it. Now German scientists believe they know why.

Researchers have pinpointed hormones that send signals to the brain, telling it to wake up. A study published in the journal Nature indicates that the hormones adrenocorticotropin, from the pituitary gland, and cortisol, from the adrenal gland, increase in the later stages of sleep to trigger the anticipation of awakening.

The study's findings show that the human mind may have some sort of conscious, voluntary control, Nature reports. The research may help develop therapies for people who have trouble waking up in the morning, those who work overnight shifts or those who need to sleep at unusual hours. No matter what they figure out, thank God for coffee.

Scanning the Web

I don't control many pests in my own turf, unless you count the neighbor's dog. For those of you whose livelihood depends on keeping pesky critters from ruining your hard work, however, here are few sites that might help you:

(***** - Bookmark it and return frequently; * - Look at only if absolutely necessary)

****http://www.pestweb.com- Good graphics, combined with good information, make this site worth visiting. It will give you tips on curbing everything from insects to raccoons. It has a searchable database to find local pest control operators and a fun section with bug songs, movies, games and other distractions to amuse you.

****http://www.gemplers.com - The only drawback to this site is that wildlife control is not all Gempler's does, so the wildlife control product section is slightly hidden among its ample catalog of products. Once you get in, however, the wildlife control section is easily navigable and offers innovative solutions, ranging from inflatable snakes and motion-sensitive owls to standard humane traps.



***http://www.flightcontrol.com - If you have geese on your course, FlightControl might be the product for you. The site is easily navigable, though the type is slightly on the small side for those whose eyesight isn't what it once was. It provides information about the FlightControl product, including specific content for golf course operators.

Scanning the Web is compiled by Frank H. Andorka Jr., Golfdom's associate editor, who thinks someone should come up with

a pest control product to take care of telemarketers who call during dinner. You may reach him at fandorka@advanstar.com with future column suggestions or sites you think he should visit.



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Grip It and Rip It

The signature hole on the South Course of Grand Cypress GC in Orlando stretches out before golfers like a lion unwinding his muscles after a long nap. The long 543-yard, par 5 is marked by grass mounds on the left side and water on the right. Bunkers guard what director of golf course maintenance Tom Alex calls "a fairly sizable green." As if that weren't enough, the water also snakes its way in front of the green.

Sounds intimidating, doesn't it?

"It's really not as hard as it would appear at first glance," Alex says. "It's a matter of playing it smart and using the right strategy to get you home."

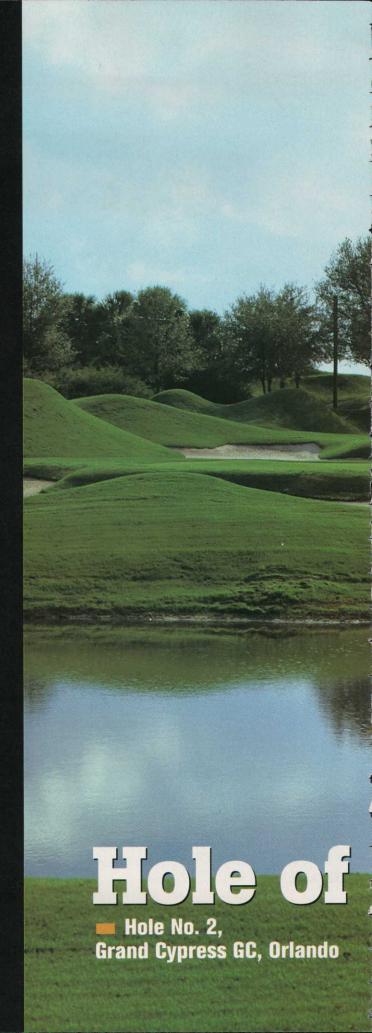
Jack Nicklaus and his associates designed Grand Cypress Golf Club in Orlando in 1983, and the No. 2 hole on the South Course has remained true to their vision of creating challenging – but playable – holes. For big hitters – and Alex emphasizes big hitters – there is the possibility of reaching the green in two. For mere mortals, Alex suggests two other ways to play the hole: hit your ball (or balls) into the water that wends up the right side of the fairway and eventually give up; or drive, hit a three wood and then lay up for an iron shot 100 yards from the green.

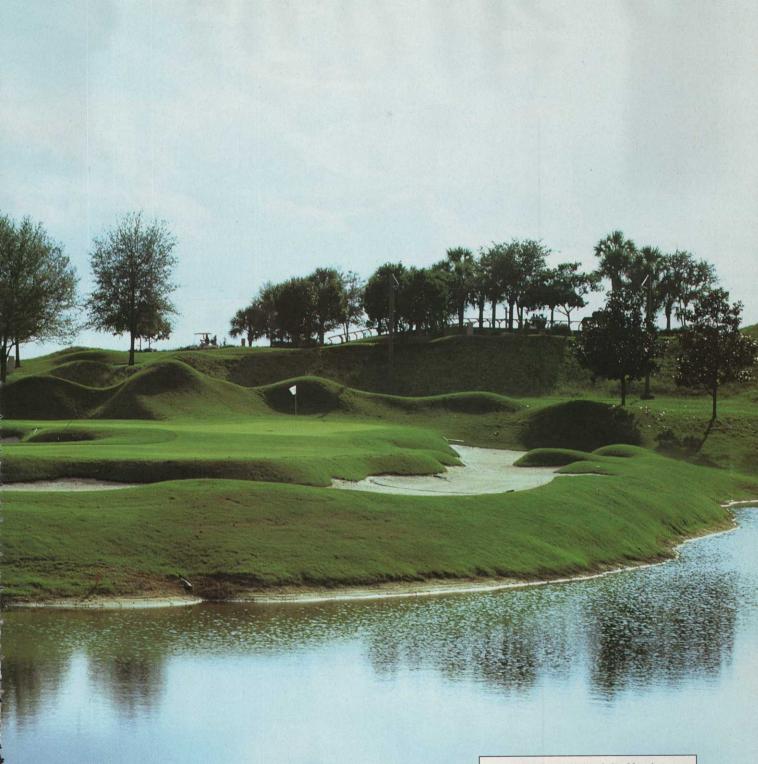
But the hole doesn't pose challenges only for golfers. Nicklaus' design behind the green consists of steep slopes to lead golfers over a bridge to the next tee. While the visual effect is stunning, Alex says it forces his crews to do handwork around the bunkers with a fly mower.

"There's just no easy way to mow around those, so the bunker faces have to be done by hand," Alex says. "That's the most challenging maintenance issue we have to deal with."

The fairway soil, which changes from heavy clay to sugar sand halfway through the hole, also presents a test of the course's irrigation system. Alex says that because of the flexibility he has with his irrigation system, the courses can adjust to the different soils to prevent overwatering.

"It keeps the hole playing consistently," Alex says. "It's a fun hole if you pay attention and don't try to be a hero."





the Wonth

Golfdom's Hole of the Month is presented in partnership with: 1721 Packard Avenue

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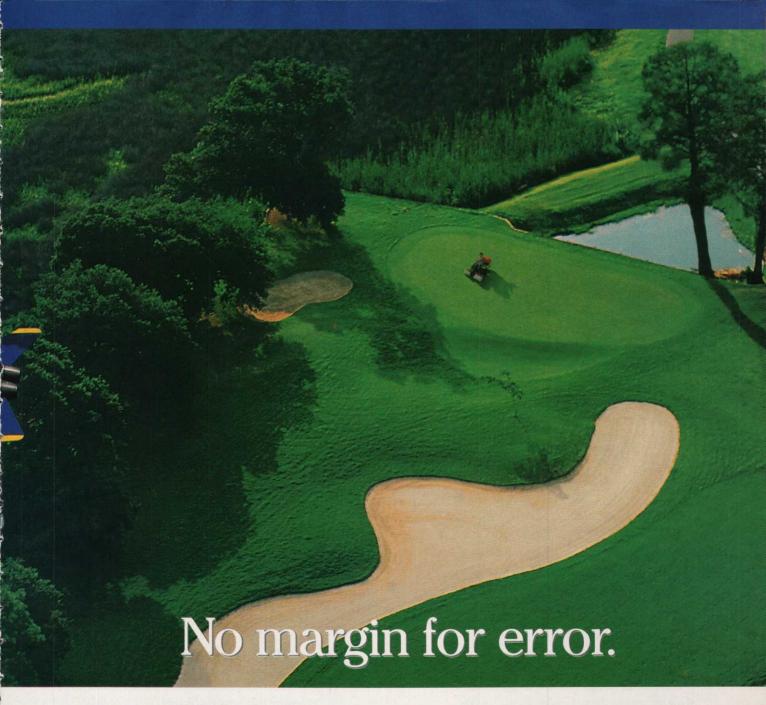
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Shades Of Green

OPINION

appy New Year, New Century and New Millennium.
These are fascinating times when we're riding a wave of high-tech energy that's speeding up our lives — but I fear we may be enjoying ourselves less now.

So here's a reminder to take into the year 2000: Man is the master of his fate, and machines are tools man uses at his discretion.

Once again, now, say it with me: "Man is master. Machine is slave." Got it? Good.

Now I hope I never again see — or, more accurately, hear — superintendents and sales reps getting up in the middle of chapter meetings and guest speaker presentations to answer phone calls on their cell phones.

What an ugly trend we find ourselves caught in as the new millennium begins in a world on a technology high. Instantaneous information and communications are like drugs. We are letting ourselves become slaves to the beep, blink and buzz.

It's great that people can stay in touch from anywhere at anytime. But having the ability to do it doesn't mean it's proper to disrupt meetings and presentations with cell phones and pagers. People need a little self-discipline, and they also need to remember the manners their mothers taught them.

While these communications devices give us more freedom to roam and still stay in touch, remember that only a few short years ago you went to the pay phone during breaks in meetings and seminars to check in with the office or with customers.

Well, people need to use the same technique now. They need to turn off those phones and pagers during meetings and seminars and make their calls during breaks. It's rude and annoying to everyone, including the guest speaker, when someone's cell phone starts ringing during a meeting. Note the term, "guest" speaker. You're supposed to be polite to them.

And what's with leaving the cell phone on during a round of golf? Last year, during a round after a chapter meeting, I saw a distressing scenario of this pathetic stunt. One of our foursome was either calling or being called by his girlfriend on every hole on the

Take That Cell Phone and Shove it

BY JOEL JACKSON



DON'T SCREW

UP MY DAY

BECAUSE YOU'RE

CELLULARLY

CHALLENGED

back nine, discussing when he was going to finish the round so they could go to dinner.

I almost fed him a sand wedge on the

Just a hint to golfing cell phone users — walking across the cart path from the tee does not put you out of earshot of the other three people trying to tee off. And having that blasted phone ring is a real bummer when you're winding up to whack that surly Surlyn pellet. I make the game tough enough on my own without Ma Bell breaking my concentration with her little ringy-dingy.

I'm really ambivalent about this cell phone thing. On one hand, I'm glad folks can get to meetings and network with peers and all that good stuff. But I don't think it's asking too much for them to use their cell phones a little more responsibly.

If they have to be up and down during meetings and take or make calls during golf, then maybe they shouldn't be there — and should be where they're calling or receiving calls from. Don't screw up my day because you're cellularly challenged.

For those suffering from cell phone-itis, I hope you can get a grip in 2000. Your bosses are flipping out as your air-time bills are soaring.

I appeal to all meeting hosts, masters of ceremonies, chapter presidents and golf pros to ask attendees to turn off their cell phones for the duration of the meeting or round of golf.

If that brings on unbearable withdrawal symptoms, then take that cell phone and shove it!

Joel Jackson, CGCS, retired from Disney's golf division in 1997 and is director of communications for the Florida GCSA. At meetings and on the golf course, he leaves his cell phone in his car.