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, Ill.-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
Is 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:

<table>
<thead>
<tr>
<th>Problem</th>
<th>Often/Sometimes A Problem For Me</th>
<th>Very/Somewhat Bothersome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recently Aerified Greens</td>
<td>67%</td>
<td>77%</td>
</tr>
<tr>
<td>Golf Course Playing Surface Too Wet</td>
<td>63%</td>
<td>70%</td>
</tr>
<tr>
<td>Golf Car Restrictions</td>
<td>43%</td>
<td>45%</td>
</tr>
<tr>
<td>Maintenance Workers On Course</td>
<td>37%</td>
<td>42%</td>
</tr>
</tbody>
</table>

Source: GCSSA, 1996; Illustration: Dan Beedy
Miniature Golf

You 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.


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 safeguards 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@advansstar.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 Stimpeter. 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.
Off The Fringe

Business 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 Nicklaus-designed 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

As 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 adrenocorticotropicrin, 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.