



## After a successful start, let's continue our cooperation

By CAROL BROWNER

Enjoyment of outdoor experiences is one of the primary reasons so many Americans place high priority on protecting the environment. For more than 14 million Americans, golf provides this kind of enjoyment — and a

solid connection to preserving and enhancing environmental quality.

What else would one expect from an activity whose goal is literally, "The Green"?

For that reason,

it is important for us to remember that the U.S. Environmental Protection Agency and the golfing community share the goal of a beautiful and healthy outdoors.

This message of cooperation and understanding is one that I conveyed three years ago, when I first wrote in *Golf Course News*. Since that time, I am proud to say that, working together, we have made a great deal of progress on our joint mission to build stronger ties, and to make them work for the benefit of both golfers and the public at large.

Let me recap some of our proudest joint accomplishments:

- The Golf Course Superintendents Association of America (GCSAA) signed on as a full partner to the EPA Pesticide Environmental Stewardship Program (PESP), while the U.S. Golf Association has become a supporting partner. GCSAA has developed a pesticide safety training course for members under a grant from PESP.

- With GCSAA's support, EPA has launched a program of fast-track registration of reduced-risk pesticides. This program is already paying off for all parties by reducing environmental risks and product development costs for registrants and making new pesticides available for users.

- Three years ago, EPA joined with environmental and golfing organizations to convene the first-ever Golf Environment Summit Conference, which was held at Pebble Beach. This commitment continued through to the following year, when a second conference was held at Pinehurst. Those conferences produced an excellent

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Carol Browner is administrator of the U.S. Environmental Protection Agency.



Photo courtesy of Audubon International

## Wildlife Links begins to bear fruit

By JOHN TORSIELLO

WASHINGTON, D.C. — The firstfruits of the 3-year-old Wildlife Links program are expected this year, according to the National Fish and Wildlife Foundation, which has undertaken the program for the United States Golf Association (USGA).

Established to fund research, management and education projects to provide information on wildlife management issues on and around golf courses,

Wildlife Links is funding several ongoing studies, including preparation of manuals on bird conservation and wetlands management for golf courses, both of which are due out this year.

Meanwhile, progress is reported on a study on amphibian conservation on golf courses; restoration of pollinator habitat on and around golf courses; and a managed lands database project.

"We were funded \$100,000 by the

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## Turfgrass info goes on-line

### Latest NTEP study findings on site

By MARK LESLIE

BELTSVILLE, Md. — No longer will golf course superintendents need to wait month on end to see progress reports on turfgrass tests from the National Turfgrass Evaluation Program (NTEP).

NTEP is on-line, with its own home page: [www.ntep.org/ntep](http://www.ntep.org/ntep) OR [hort.unl.edu/ntep](http://hort.unl.edu/ntep).

"It makes sense that we allow people easy access to the information we have," said NTEP National Director Kevin Morris from his office here. "We can post updates, corrections, etc. much quicker than in print. It is a way to circulate information accurately and quickly."

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### Michigan State's TIC full of data

The Turfgrass Information Center (TIC) at Michigan State University has announced the global debut of the Turfgrass Information File (TGIF) database online through the World Wide Web. The continuing 10 year project to provide access to turfgrass research online is now fully available through almost any computer and features easy search capability and convenient access. Over 40,000 items are searchable using more than 300,000 keywords.

For full details about TIC and TGIF, Turfgrass Information Center homepage on the Web is at:

<http://www.lib.msu.edu/tgif>.

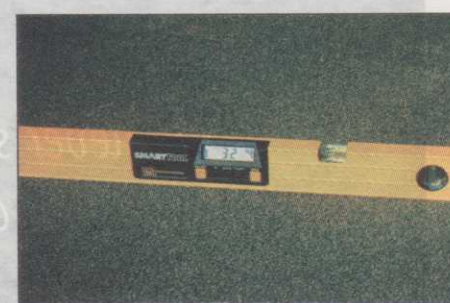
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## Gadgets can make jobs more efficient

By MARK LESLIE

EDWARDS, Colo. — Some of the most effective tools for golf course superintendents are found, not at the turf equipment supplier's, but at your friendly neighborhood electronics and hardware stores.

Kevin Ross, the Country Club (CC) of the Rockies superintendent who has gained a reputation for innovations that solve problems on the golf course, told a Public Golf Forum audience they can save time — and anxiety — with a few purchases from this unlikely source. Among



Kevin Ross photo

The Smart Level at work.

the items, he numbered:

- The Smart Tool, which measures slope.
- The Pocket Secretary voice organizer.

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## On being a conservator

By RON DODSON

The word "conservation" has a thrifty meaning. To conserve is to save and to protect, to leave what we ourselves enjoy in such good condition that others may also share the enjoyment. It is an expression of good manners to nature and to our fellow citizens, including those generations that have not yet been born. Why shouldn't that politeness extend beyond our own parents and offspring to our great-great grandchildren?

Only a little more than 300 years ago, the whole North American continent had been little altered by human activities. It was a temperate-zone Garden of Eden, the last of the sort that existed on earth. In the forested parts of what is now the United States, trees not only covered the ground, but they also grew to their greatest size and then continued to live until storms or lightning overthrew them, or until they died of old age. Other areas of the continent were carpeted with long prairie grasses, which served, like the forest and its undergrowth, to bind the soil and thus prevent it from being washed away by rainfall

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## Taking advantage of GIS & GPS

By KEVIN P. CORBLEY

LAKEWOOD, Colo. — What good is a computerized map of a golf course, anyway?

"Ninety-five percent of golf course maps are no good at all because they're paper and they're out of date," said Larry Rodgers, president of Larry Rodgers Design here.

Computerized digital maps, on the other hand, are accurate, easy to update and gaining wider acceptance every day among golf course superintendents.

People are finding new uses for them in maintenance, construction and daily operations at courses around the country.

Digital maps would have found their way into course superinten-

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## Gadgets save time, effort

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- Radio headset.
- Cordless telephone.
- A bubble level.
- Bristar, a "non-explosive demolition agent."
- Vinyl, adhesive lettering.
- Bicycle water bottle cages.
- Cement and PVC pipe.
- Collar Stick.

One of the great, and exciting, facets of a superintendent's job are the odd obstacles they sometimes face, Ross said. "And I like to think of new ways to solve problems. But sometimes the answer is down to your local store."

The Smart Level, for instance. "You can measure green surface slope, or the slope while installing drain pipes," he said. "The longer you have it, the more uses you think of for it."

The Smart Level came to Ross' attention when renovating CC of the Rockies' greens with Jack Nicklaus. "Jack has certain criteria for greens surface slope. He likes most of his puttable areas with 1 degree or less slope."

When the Nicklaus people appeared with the Smart Level—voila!

"We do all the puttable areas in our greens construction renovation using this tool now," Ross said. "You can tweak at 4/10ths of a degree if you like with this tool."

He said the instrument, which comes in 2- and 4-foot lengths, is excellent also for finding flat areas to consistently Stimpmeter greens. "Your eyes are deceptive," he said. "You may think a green is relatively flat and you put this Smart Level down and it reads 3 to 4 percent. That's quite a difference."

Ross' crew has also used the tool in bunkers. "We don't have any downhill lies in shooting toward the greens," he said, "so we have the bunker floor flat or with a slight uphill slope toward the green."

The tool now costs around \$100, he said.

The Pocket Secretary, containing 18.4 gigabits of information and trained to the voice of its owner, is a wonderkind, Ross said. "I carry it with me all the time. It records 100 messages, buzzes me for meetings. If I want to call somebody I just say that person's name and it reads out their phone number.

"It's so good I bought one for my assistant."

Though it once cost \$3,000, he said, it now can be bought for under \$100.

While Ross bought a headset for himself, he now has an extra unit for crew members. "If an assistant is operating a backhoe

or something where it is loud and he can't hear, it works well," Ross said. And the cost is only \$30 to \$35.

"When we bought a cordless telephone for the house," he said, "I thought, 'This is the greatest thing we've ever done. I can leave the room, go downstairs...' Well, think of it for the golf course."

Ross bought a 900 MHz phone (available for about \$130 today) and said, "It's very valuable to

us. This phone allows me to be up to 200 yards from my office. If you are waiting for an important call, you can clip it to your belt and do things around the office or shop. You can do such things as check supplies when you're on the phone with a sales rep, for instance.

"This pays for itself quickly."

The bubble level, meanwhile, is tiny but immensely helpful. His crews use it to level irriga-

tion heads, rather than by sight.

Explaining his use of Bristar, Ross said, "If you have ledge or rock areas, no matter how much topsoil you haul during construction, you have problems with it."

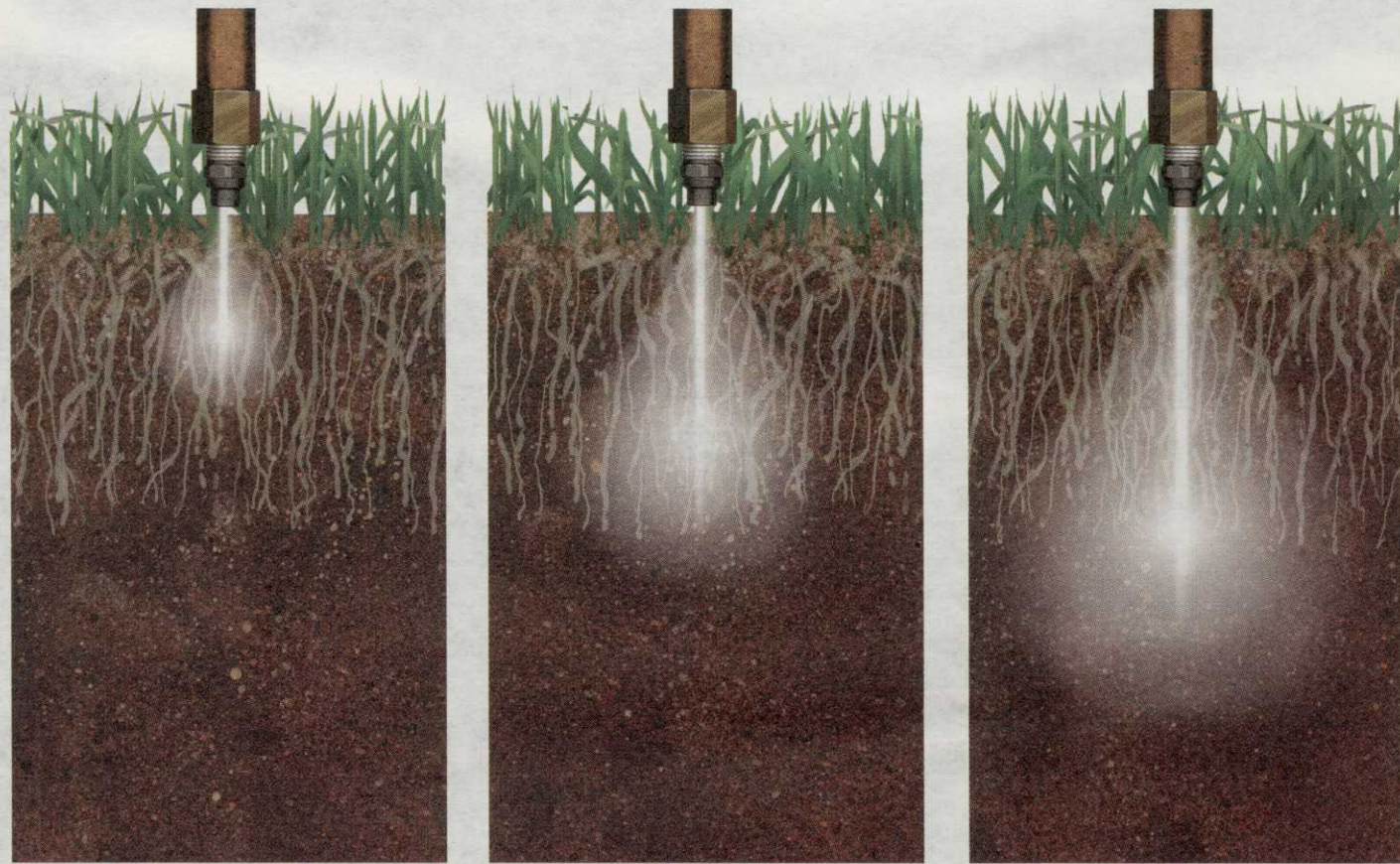
The non-explosive solution is to drill down into the ledge or rock, and add this material into the hole. The Bristar expands and cracks the rocks or ledge, so that it can be hauled away.

The vinyl adhesive lettering is

used in many ways for organization—and protection—at CC of the Rockies, from marking fairway mowers to labeling types of fuel.

"Every year someone puts diesel in the gas, or gas in the diesel," Ross said. His solution: Have a sign company punch out little vinyl letters, a "G" for gas, "D" for diesel and "M" for mixed, and label each fuel can correctly.

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From tee to green, the Envirojet's infinite adjustment lets you direct liquid and chemical injection anywhere from 1" to 6" below the surface.

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## N.Y. assn. honors SUNY Delhi's Morales

SYRACUSE, N.Y. — The New York State Turfgrass Association (NYSTA) awarded its 1997 Citation of Merit to Dominic Morales, Chairman of the Department of Plant Science at SUNY Delhi.

The Citation of Merit is awarded to a member of the turf industry who exemplifies the goals of the association. Among the qualities considered by the board in choosing a recipient are:

dedication to turfgrass research and education, involvement in and support of association activities, interest in promoting careers in the turfgrass industry, and the admiration and respect of peers and colleagues.

Morales was awarded the Chancellor's Award for Excellence in Teaching at SUNY Delhi. He has appeared as a visiting

lecturer at the University of New Hampshire, NYSTA Conferences, Cornell's Turfgrass Management Short Course, and numerous industry organization meetings. Morales has coordinated and implemented a work study program for high school students interested in horticulture practices and gives presentations on career opportunities

in the green industry. He developed a Master Gardener Program with Cornell Cooperative Extension of Delaware County, and works with area schools to upgrade and develop maintenance programs for athletic fields.

Active in NYSTA, Morales has served on committees and is a recent appointee to the New York Greengrass board of directors.

He is a member of the Golf Course Superintendents Association of America, Associated Landscape Contractors of America, International Society of Arboriculture, and New York State Nursery/Landscape Association.

Morales received his associate degree in ornamental horticulture from SUNY Farmingdale, his bachelor degree in plant science from the University of New Hampshire at Durham, and his masters in environmental horticulture from the University of Connecticut at Storrs. He has been instrumental in developing the curricula at Delhi, initiating an internship program and an industry advisory committee, increasing student scholarships, and a master plan for the Plant Science Valley Complex. This plan, which began in 1976, grew to include the Turf Education Center and the back nine of the Delhi Golf Course.

## Using gadgets

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Since Ross's course is divided into Red, Green and Blue sections, the mowers are marked with a large vinyl dot the color of its section.

"You can spend a lot of money and buy the packs of letters and numbers at [the department store], in which case you have a lot of leftover letters you'll never use, or you can have exactly what you want made," Ross said. "We did all our gas and other signs made for a hundred dollars."

The cement and PVC pipe come in handy with CC of the Rockies' many bird houses. A member of the Audubon Cooperative Sanctuary System for Golf Courses, the course has a number of bird boxes that are removed during the winter time. Feeling that "nothing looks worse than crooked birdhouses," Ross had crews sink PVC sleeves in the ground and cement them so that they cannot get crooked. The sleeves are marked with flags during the winter snows and easy to spot in the spring when the bird boxes are reinstalled.

So, what place does a bicycle water bottle cage have on a golf course? "In the mountains, at 7,500 feet elevation, where we have tremendous sun intensity and 1-degree humidity, you have the symptoms for altitude sickness," Ross said. "One preventative measure is to keep hydrated. I tell all my crew when I hire them to keep a water bottle with them."

The collar stick was invented after many years of seeing collars lose their uniform width, Ross said.

"We just tapped the outside height adjusters, cut lengths of metal rod, threaded the rod into the adjusters, made a marker on the outside, and bingo — perfect collar widths every time," he said.

Conveniently located control panel ensures simple operation of the Envirojet.

The large 160-gallon tank and the only mechanical agitation in its class creates and maintains even mixtures and allows for the use of wettable powders, liquid concentrates and polymers.

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Rotating brushes provide a clean finish with top-dressing capability for turf that is immediately playable after treatment.

All-mechanical, electronic-free sequencing gives you even distribution without danger of over-application on hills, through turns, or at stop and start.

The patented injection process disperses liquids from each nozzle to cover a width of more than four inches beneath the surface. This ensures total target area saturation and eliminates incomplete or inconsistent coverage.

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