

## Discovering nature's bounty, and environmental promise, in golf

By MARTIN BYHOWER

To many committed environmentalists, golf courses are, by conventional wisdom, anathema. Perceived as destroyers of valuable natural habitats, guzzlers of precious, diminishing water supplies, and sloppy repositories for pesticides, herbicides, and chemical fertilizers for the sole purpose of maintaining a sterile monoculture of grass, they are the last place most of us would expect to harbor wildlife! Yet some ardent birders have recognized, at least empirically, that certain golf courses can be good places to spot unusual species.

If you think about it, it makes sense. Birds and humans generally like the same kinds of places, and this is no coincidence. Behavioral scientists identify the "ideal human environment," that is, one to which we would naturally gravitate to live (and, presumably, play) as consisting of grassy (savanna) areas with interspersed trees, overlooking natural water sources.

Whether this harkens back to ancestral hominids descending from trees in an African savanna is the topic of a different essay! Birds like trees and water, too, and for many types, an open grassland bordering a grove of their preferred tree species provides the appropriate mixture

*The above comment appeared in Hummin', the newsletter for Palos Verdes/South Bay (Calif.) Audubon, a chapter of the National Audubon Society.*

of foraging and nesting habitats.

Unfortunately, many important wild habitats, and their inextricably linked native species, have been lost due to the development that often accompanies golf course construction (and, on occasion, golf courses have been the precursors or lures used to sell such developments). Management practices that utilize large amounts of fertilizers or toxic chemical additives, particularly those that are non-degradable (many of which are now, however, being phased out) have been demonstrated to be harmful to wildlife species that try to survive on or adjacent to golf greens. And building water-guzzling golf courses in arid desert environments like Palm Springs, is, in my mind, rather difficult to justify on any grounds.

Golf courses are a fact of life, however, providing recreation for many of the human species. Although the birding habit consumes most of my own leisure (not to mention side-vocational) time, I have friends who balance their addiction between birds and birdies. A remarkable visit on Aug. 12, 1994, to the Virginia Country Club in Long Beach, however, opened my mind to the possibility that golf courses and nature can coexist; for me, this was a startling but very welcome revelation, for it suggests the possibility of two seemingly disparate groups of recreation-seekers becoming allies in ways that enhance the quality of life for both (not to mention aiding in the survival of other critters!).

I would imagine that most golfers

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## Increase of jobs tied to upgrades at daily-fee, municipal courses

By GEORGE HAMILTON

A question that is often asked of turfgrass science educators is "Are you producing more graduates than there are job opportunities?" This is a legitimate question. After all, our mission should not be to produce a sheer number of graduates to support our reason for existence, but to continue to fill a void and meet the demands of our industry. Of course, one demand may be to have the opportunity to select from several qualified applicants for each position open.

The job market for turf graduates this year in the Northeast has been the best I have seen in the past few years. I believe a couple of things are responsible for this.

First, there seems to be an increase in the number of jobs available at single-owner and municipal golf courses with low budgets. Obviously, the low-budget operations typically don't have the money to support a full-

time, well-trained superintendent. An increase in job opportunities in this segment may be the result of the demand for better playing conditions from players. I think the more likely reason is the fact that the superintendent position has become much more complex. This is especially true when considering the environmental issues,

pesticide usage and regulation, and worker protection.

Of course, if these positions are going to be attractive to people with the appropriate qualifications, the salaries and benefits will have to match those qualifications. When hiring people for important positions, the adage "You get what you pay for" definitely holds true.

The second, and largest area of demand for turf graduates continues to be assistant and second assistant superintendent positions. This year and in the past we have had many more job openings than graduates to fill them. As of early April, we had received job announcements for 57 assistant and second assistant positions since November. Dr. Trey Rogers of Michigan State experienced the same

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George Hamilton

*George Hamilton is a member of the faculty in Penn State University's Turfgrass Management Program.*

## Letters

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There was some confusion about my remarks on the floor of the show in San Francisco to Mark Leslie, and that is very understandable.

There was some discussion of the need for standardized equipment for testing. Many people are not aware that much of the equipment is manufactured by the labs. Sometimes it is hard for associations like the USGA to understand the competitive nature of the commercial industry. As an example, Turf Diagnostics & Design has spent close to \$500,000 in capital funds and development time to produce equipment and test procedures that have set the standard for the industry. This is borne out by the presence of a considerable amount of our development work in the 1993 USGA Guidelines. I could never justify to my investors turning over five years of work to my competitors as part of the accreditation process. In my conversation with Mark Leslie, my five-year scenario included an attempt to standardize the equipment. However, multiple labs have contacted me about this issue and are strongly opposed to any attempt to standardize the equipment.

Imagine if you will: The head of R&D for Toro calling Rainbird's head of R&D and asking him to fax over their latest information on head design because they were

having problems with one of their new heads. The same scenario could apply to Flowtronex/PSI or Watertronics, Scotts and Lesco. Not likely to happen in my lifetime.

Perhaps this analogy will help people better understand this lab issue and the 1993 Guidelines. Let's relate the USGA 1993 Guidelines to a Burberry suit. If you are a 44 reg., but they sell you a 46 long, well, that's still an excellent suit from Burberry's, but not for you. The USGA 1993 Guidelines are akin to a rack of Burberry suits; the key is getting the right fit. If you want to assume that all the labs are producing the same numbers, please understand that just puts you in the clothes store, you will need the right fit. To extend the analogy a little further, it also pays to have a fine tailor when the environment is at stake.

A closing comment to Charlie von Brecht. In my opinion, the GCN Letter to the Editor forum is one of the most important reasons for the overall improvement of the golf development industry.

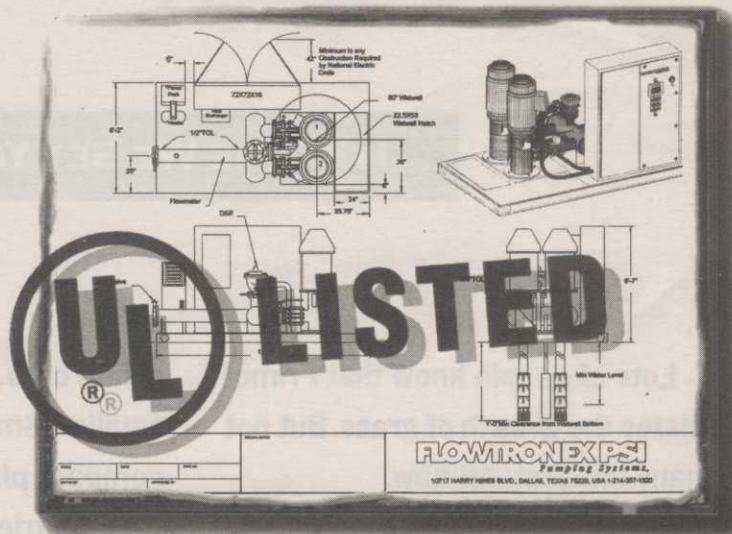
Stephen McWilliams  
president/CEO  
Turf Diagnostics & Design  
Olathe, Kan.

*Ed. Point taken on the media's need to "sell newspapers." Fortunately for GCN and its readers, our newspaper is free to all qualified readers, like Mr. McWilliams.*

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## Audubon name change

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motivators toward sustainable development."

The strategy should be in place by May or June, Dodson said. "I'm excited. It is helping us decide where we're going, define our programs and generate data."

Pebble Beach Co. Vice President Ted Horton, whose company had won a New York Audubon award, applauded the action.

He pointed out that when Pebble Beach was honored, area citizens gave it little notice because the citation came from a state organization 2,000 miles away. "Yet, the Audubon programs are truly international," he said. "This name change will better reflect the importance and broadness of the Sanctuary and other programs."

The Audubon Society of New York staked a claim in the golf industry when it teamed with the U.S. Golf Association to create the Audubon Cooperative Sanctuary Program for Golf Courses four years ago. Since then, it has added the Audubon Signature Sanctuary Program, for golf courses not yet built, and the Audubon Heritage Program, which is geared toward entire resorts.

## A bird-watcher's awakening to golf course's influences

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at the Virginia CC would be delighted to learn that the swallows who follow their golf carts as the tires stir up insects can each eat over 1,000 mosquitoes in a single day. I was amazed at the numbers of barn swallows I saw during my visit and I saw good numbers of other swallow species as well. Swallows need mud sources, water, nesting sites, and a lack of nasty pesticides in order to live. These swallows probably nest on some storage buildings on the property and under the many nearby road trestles over the Los Angeles River.

I was pleasantly surprised when Ray Davies, the golf course superintendent at Virginia, told me that he was using no non-degradable insecticides (as now required by law) and that, in fact, the only insecticide he uses targets the cutworm moth larvae that are dug up by crows, who destroy turf in the process. (Since crows are notorious nest robbers of increasingly rare species, I can heartily endorse efforts to drive them away).

I saw a lot more than swallows on my morning tour, however. An intern of Ray's, a landscape architect student named Tonya, took me around on a (non-polluting and quiet) electric golf cart. I would bet that even the most ardent golfer would stop, at least briefly, to appreciate the beautiful black and orange hooded ori-

oles we saw nesting in the club's Washingtonia palms. In the same general area I spotted a Nashville warbler, at that time remarkably early in its fall migration from its nesting grounds in the Northern U.S. and Canada to its winter home in tropical Mexico or Central America.

I started to notice a good number of our native species — lesser goldfinches, bushtits, Anna's hummingbirds, scrub jays, northern mockingbirds, black Phoebes. I imagined the area busting with birds during the spring and fall migration periods, in addition to the winter season, when many species congregate in our mild Southern California climate. I began to wonder if there was something different about this particular golf course, something that made it more wildlife-friendly than others.

I was partly correct. Looking around, I saw the wonderful old California Sycamore trees, the lovely Liquidambar, and several other native or otherwise wildlife-friendly species. I realized the club is adjacent to both a botanical oasis called Rancho Los Cerritos and the Los Angeles River, both of which are magnets for wildlife. I saw all the wildlife around me, and began to envision how much more there could be without compromising the functionality of the golf course; on the contrary, most of the things I had in mind were minor changes that would probably enhance the already considerable beauty of the place. And I began to realize that other golf courses, even those less favorably situated, could easily be modified to enhance their value to wildlife without compromising the golfer's needs.

It turns out that Ray was way ahead of me on many, if not most counts. Nearly all of the water used by the course is tertiary-treated wastewater (a small amount of city water is used on the perimeter to prevent salt buildup on the greens). The water that infiltrates the soil is purified by the thick, biologically active thatch, and that which does not evaporate or become transpired by the plants helps recharge the local groundwater supplies or to fill the ponds, which were teeming with mallards and which, Ray tells me, harbor large numbers and several varieties of ducks as well as Canada Geese in the winter. Thus, the Virginia Country Club, though it utilizes a good deal of water, has very little impact on available drinking water supplies, and in some ways actually helps to improve the situation!

I'm hoping that some of the excess water that drains from the course could be used to replant and restore a portion of the native willow forests that once dominated the flood plain of the (unchanneled) L.A. River, in the currently dry, weedy area between the golf course

and the concrete-lined river channel. It would greatly help support wildlife, and probably help cool and green the area. I also imagine islands in the center of the club's ponds where the waterfowl and shorebirds that use the park can rest, and perhaps even nest, safe from disturbances by humans, foxes, or other predators.

Ray and I are in remarkable agreement as to which trees and other plants are desirable, even if we arrived at our conclusions differently. Cottonwoods and white alders are beautiful natives that shelter and feed migratory bird species. Silk floss and coral trees, though not native, have beautiful flowers that also happen to produce a lot of nectar, attracting some of our most beautiful migrant bird species. When less desirable trees die, they could easily be replaced by these and other valuable species (although it is important to leave a few dead trees standing at any given time if one is to have a completely balanced ecosystem).

Lemonadeberry and toyon are both wildlife-friendly native shrubs that require minimal care and which could be used to vegetate and stabilize dry slopes in some appropriate areas of the course. For the turf, Ray uses a naturalized species of grass that is not only preferred by golfers but requires less care than other species. He has even helped in efforts to live-trap and relocate the abundant, non-native red fox, which devastates native wildlife as well as, on occasion, golf greens. (I wish that there was an appropriate place to relocate this beautiful animal, but alas, these are lacking in the US for this European species.)

My experiences with Ray and Tonya reaffirmed a changing pattern in my approach to environmental activism. Certainly there are "good guys" and "bad guys" in the battle to save our environment's integrity, but a lot of the so-called bad guys may be merely uninformed and thus unappreciative of the natural order of our biosphere. Then there are those that we assume are "bad guys," merely because they are in a role that is traditionally pegged as such. This is dangerous and counterproductive. Tonya, for example, told me that she is interested in golf course management precisely because of her love of nature and her desire to see that golf courses are designed and maintained in a manner that is consistent with sound environmental principles. Ray, likewise, is working within the constraints of his existing golf course and his long-term constituency to educate both himself and (gently) others in order to facilitate their needs and desires, while making sure that Virginia Country Club is a good host and neighbor for humans and non-humans alike. These folks in particular need our support, understanding, and ideas, for they are the ones who can truly initiate the changes we like to talk about.

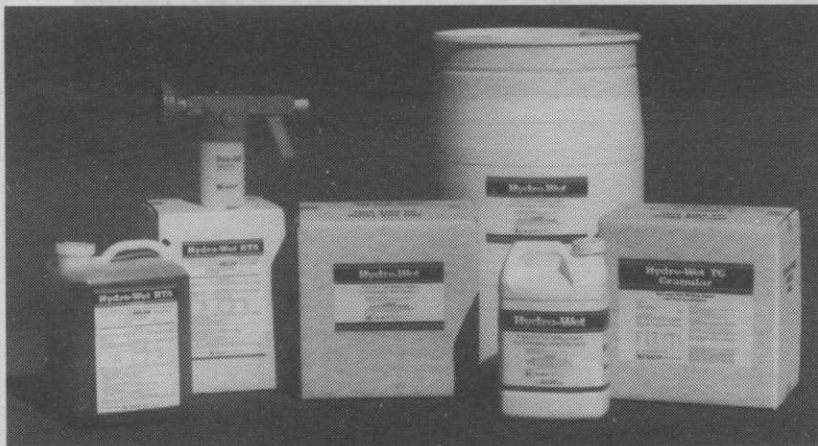
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## Gast leaves USGA for Jupiter Hills

JUPITER, Fla. — Chuck Gast, who for four years has been an agronomist with the U.S. Golf Association (USGA) Green Section, has taken the position of head superintendent at Jupiter Hills Club here.

A Kansas State University graduate who had been superintendent for 13 years at Tascosa Country Club in Amarillo, Texas, Gast split his duties between the USGA's Florida and Southeast regions.

He will be succeeded by Christopher Hartwiger, who is finishing his master's degree studies in agronomy at North Carolina State.

Hartwiger, whose thesis was on light-weight rolling of bentgrass putting greens, has been teaching a class and working at the Pinehurst golf courses. A graduate of the College of William & Mary, he will be headquartered in Alabama.