

keep it up indefinitely.

"We have one man who does nothing but preventive maintenance, so the equipment will last longer, and we can keep rebuilding it over and over again."

"As long as you do it *right*, you can do it indefinitely," interjects Lanning.

Doing it "right" involves stripping the machine to its framework, removing the old paint and starting with a fresh coat of primer. Every machine is completely re-wired and every part is cleaned and repainted or replaced. The engines are rebuilt or replaced.

"We use 100 percent original factory equipment," Lanning says. "We don't try to do any upgrading. In fact

that's one of two valid reasons for buying new equipment: when the technology changes to the point that "newer" really is "more efficient," it's time to get the new."

The other reason to buy new equipment, Lanning says, is to make up for the lack of mechanical skill.

"If you don't have the knowledge to do it right, don't even try it," he says.

Rebuilding is only half of the Boca Woods program.

"Once we get a piece of equipment in shape, we put it into a program of daily maintenance: washing it and hand-drying it daily, waxing it weekly or monthly, whatever is appropriate."



John Hindman wanted to get back to a golf course

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Operators keep their names shined

If the equipment is to be used almost exclusively by one operator, Gallagher has another trick. "After it's been rebuilt, we paint the

operator's name on it and put it on the floor with a can of wax and a towel."

Although the operator is expected to keep his equipment washed and waxed, he is not supposed to do any maintenance.

"The operator never touches a grease gun or a can of oil," says Gallagher. "That's the PM guy's responsibility."


Another Gallagher-Lanning technique is to assign each mechanic to one nine. First thing in the morning, each mechanic goes out to make sure all the equipment is running right on "his" course.

"They don't stay out there very long, but it saves time if they're right there

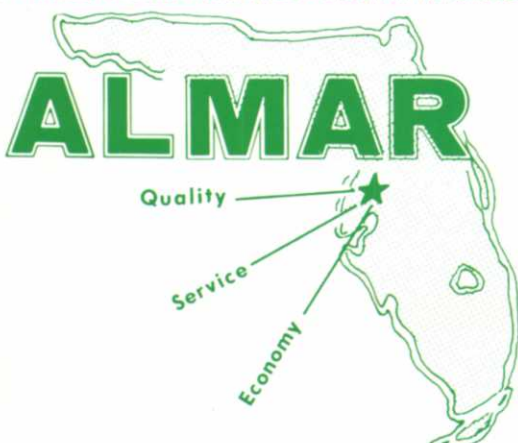
when adjustments have to be made to the reel mowers."

Gallagher's enthusiasm is not lost on his boss, Bernstein.

"We started with weed-infested, mole-cricket-damaged, unhealthy turf and no working equipment to maintain it. Many superintendents would have walked away from this challenge.

"What John and Don and their staff have accomplished is almost miraculous. Now, when you walk into this place, it's something we all can be proud of. And the members will reap the benefits for years because, not only will they have superior playing conditions, but our capital expenditures will be considerably less." 

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FAST RELIEF FOR CONGESTION HEADACHES.



Prince of Naples

BY BRADLEY KLEIN

Within the immediate community of designers, builders and superintendents who have worked with him, Arthur Hills gets high marks for his meticulous craftsmanship and attention to detail.

Golf course architect Arthur W. Hills has not acquired the reputation that his work deserves. Within the immediate community of designers, builders and superintendents who have worked with him, Hills gets high marks for his meticulous craftsmanship and attention to detail. Yet to wider golfing circles, he remains largely an unknown figure.

The public has seen his best Florida work, even if it cannot identify the architect. Last winter in a PR man's dream come true, Arthur Hills-designed golf courses were featured in three consecutive weeks of national golf tournament telecasts.



Sensitivity to the environment won Hills international acclaim for his work at Bonita Bay.

On Feb. 17-19, 1989, the Senior PGA Tour set up shop for the GTE Suncoast Classic at the Tampa Palms G&CC with ESPN televising the proceedings. The next week ESPN showed the seniors in Naples for the Aetna Challenge at Bonita Bay. On the third week NBC telecast the Honda Classic, played on the TPC Course at Eagle Trace in Coral Springs.

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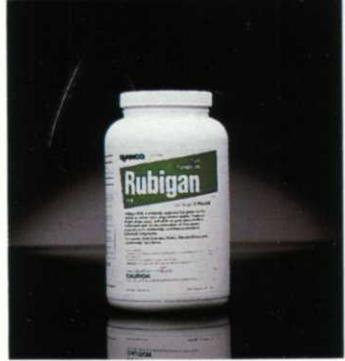
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TREATED

UNTREATED

Each of these courses is ranked by *Golfweek* among Florida's top 50. So too is another Arthur Hills design, Coral Oaks Municipal GC in Cape Coral. And Hills is one of only nine active architects with a course — Bonita Bay in Bonita Springs — ranked among *Golf Digest's* top 100 nationwide.

Hills has designed so many fine courses in Southwest Florida that he has been dubbed "The Prince of Naples." But his demeanor is anything but royal. He is a quiet fellow who prefers to go about his work rather than promote it.

Born in 1930 in Toledo, Ohio, he played on the golf team at Michigan State University while earning a degree in horticulture. After a stint as a landscape contractor, he took a graduate degree at the University of Michigan, writing his thesis on golf course design.

The path he took into the business was, in Hills' own words, "pretty mysterious." He got his first taste of course design in 1966 when, following up on a friend's suggestion, he built nine new holes for the Orchard Hills CC in Bryan, Ohio. By then he had five children and was making a pretty good living, so he was reluctant to make a career shift. But while working as a landscaper, he put a listing in the phone book as "golf course architect" and the phone began to ring. It hasn't stopped since.

Now Hills is secretary of the American Society of Golf Course Architects. He has designed nearly 60 new courses, two dozen of them in Florida alone. Among his dozens of renova-

Most of Hills' Florida work is in the southern Gulf area

tion projects are such prestigious assignments as Oakland Hills in Birmingham, Mich., the Inverness Club in Toledo, and Oakmont outside Pittsburgh.

His main office, 10 miles west of Toledo, comprises three buildings on an old farm. Much of the land neighboring the property has been heavily developed, but characteristically for Arthur Hills, he holds his ground against such "modern" encroachment and prefers to surround himself with

the comfort of shady old trees.

In the Toledo headquarters, Hills is joined by chief manager Steve Forrest and a number of landscape architects and draftsmen. Together, they keep track of the 10 to 15 projects that are under way at any one time.

Normally, Hills personally makes at least six on-site visits per project. Other members of the firm will look in periodically to oversee plans and to carry out the changes that are frequently in order. To help him keep

New courses completed

Bonita Bay Club _____	Bonita Springs
Club at Pelican Bay _____	Naples
Coral Oaks Municipal _____	Cape Coral
Countryside at Berkshire (Executive) _____	Naples
Cross Creek (Executive) _____	Fort Myers
Foxfire CC _____	Naples
Gator Trace _____	Fort Pierce
Imperial CC _____	Naples
Ironhorse _____	West Palm Beach
Jonathan's Landing (Old Trail North) _____	Jupiter
Myerlee CC (Executive) _____	Fort Myers
Palmetto Pines CC _____	Cape Coral
Pine Lakes CC (par 3) _____	Naples
Quail Creek CC _____	Naples
Seville _____	Hernando County
Tampa Palms _____	Tampa
The Meadows (Groves walking course) _____	Sarasota
TPC at Eagle Trace _____	Coral Springs
Vista Gardens (Executive) _____	Vero Beach
Vista Royale _____	Vero Beach
Wilderness CC _____	Naples
Willoughby _____	Stuart
Windsor Parke _____	Jacksonville
Wyndemere G&CC _____	Naples

New courses under construction

Bonita Bay Club (second 18 holes) _____	Bonita Springs
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Renovation projects

CC of Florida _____	Boynton Beach
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Courses in planning stage

Collier Tract #22 _____	Naples
The Reserve _____	Port St. Lucie
Wulfert Point _____	Sanibel Island

close contact with projects, Hills relies upon Keith Foster, an ASGCA member and superintendent by training who works out of the Phoenix office, and Mike Dasher, a civil engineer and ASGCS member who works out of Orlando. With all the paperwork that flows through the company, however, nothing goes out the door without Hills lending his hand and giving his approval.

Hills has acquired a reputation for environmentally sound design. Bonita Bay is a good example of integrated wetlands. Here environmental concerns serve not as a detriment but as a plus in the design. The natural-looking beauty of the marshlands is preserved by setbacks that keep the most sensitive areas out of direct play. By using multiple textures of grasses for the rough and surrounds, Hills was able to delineate buffers for wetlands at Bonita Bay. The effect is to have softened the punitive character of the water hazards while drawing upon them to frame each hole.

At Coral Oaks Hills had the task of building a public facility for the city of Coral Springs on a very limited budget. Construction costs as well as subsequent maintenance budgets had to be held down. By specifying in advance the earth-moving requirements and desired gradations in fairways, tees and greens, Hills was able to ensure a close relationship between bids and final costs.

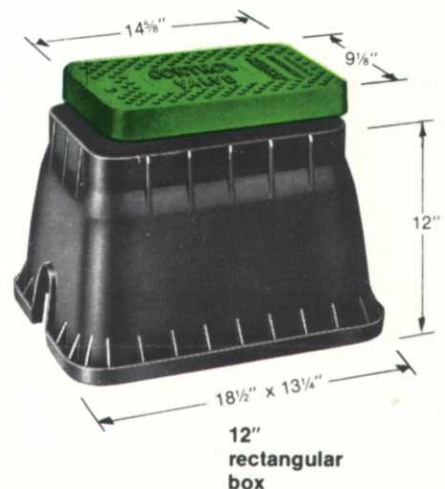
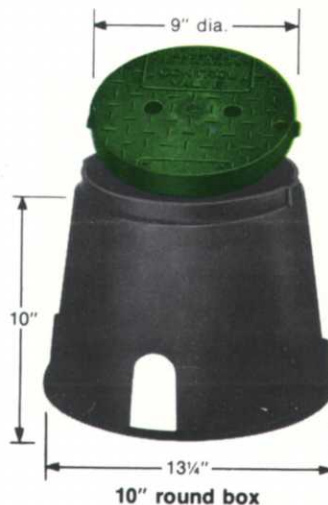
As many architects like to say, once the basic shaping has been done, a wave of the arm here or there to move a mound or change elevations can

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Hills does not design the kind of “signature hole” which is more suited to being photographed from a helicopter than to being played on the ground.

cost \$5,000. Hills regularly details a master plan that will determine between 90 and 95 percent of what will actually turn up as the golf course. Greens contours are detailed down to elevation changes of two and a half inches (0.2 feet). The whole plan for Coral Oaks, including clearing and grading, elevations, tee shapes, water bodies, contours and mounding, was then bid out, with Ryan Eastern Inc. of Deerfield Beach finally getting the contract.

Right about the time the bids went out in December, golf course superintendent Don Stewart was brought on board. Throughout the construction process, he served as mediator between the architect and the contractor. By participating in the earliest phases of the golf course, Stewart also was able to consult with the designers on an appropriate maintenance plan.

Coral Oaks was the first golf course that Ryan Eastern had ever built, so special attention had to be paid to communicating the designer's intentions to the earth movers and shapers. By Stewart's account, field rep Dasher visited every two weeks for a day or two. Together they walked the course, kicked stones, consulted on which trees to save, and worked out plans

for grassing and maintenance. They also assessed shot values and sight lines — aspects of courses design that no blueprint can fully anticipate in advance of actual construction.

Ground was broken at Coral Oaks in March, 1987. Hills and Dasher had examined the site from the air, had walked the center-cut lines, and had also consulted topographic maps in determining their routing plan. But because the land had been overgrown with thick Brazilian pepper, the architects could not get a full view of the terrain until the actual clearing began. Only then did they discover the real beauty of the native oak trees on the site.

A few subtle shifts in the placement of fairways and greens sites were needed in order to protect the maximum number of specimen trees. The biggest changes were that the 15th hole was shifted to the west to accommodate a stand of oak, and the 14th hole, originally planned at 325 yards, was shortened so that now it checks in at 283 yards. Hills' view is that “once a par four is short, it doesn't hurt to make it shorter” in order to acquire other assets. By way of compensation, the green at 14 was toughened up a bit in terms of slope and bunkering.

By the time the golf course was planted, Stewart already had a good idea of what it would take to keep Coral Oaks in good shape. The greens

are all Tifdwarf, the tees are 328 bermuda and 419 bermuda was used for the fairways. Sprigging was done by Grassing Unlimited of Tifton, Ga. Appropriately enough, the company finished grassing the golf course on Christmas Eve 1987. The golf course has since proven to be one of the finest presents the people of Cape Coral have ever received.

Hills does not design the kind of “signature hole” which is more suited to being photographed from a helicopter than to being played on the ground. Thankfully, he does not stamp a golf course with a trademark, such as Italian marble bunker walls or lakes that spray champagne. Instead, Hills builds courses that speak for themselves in terms of their design integrity, their accessibility to players of all skill levels, and their maintainability at reasonable annual budgets.

At Coral Oaks Hills has created bunkers that are not ominous. His preference is not to present the sand in an intimidating manner, but rather to build the bunker floor low to the ground and to make a minimum of sand visible. By stretching out bunkers horizontally, Hills creates the illusion of more hazards than actually exist. These bunkers can be maintained readily with mechanical rakes. By rolling down the bunker faces slightly and by altering their pattern around the perimeter, Hills is able to avoid a formulaic look.

His bunkers neither terrify approaching golfers nor make escape from the sand impossible.

The strategic placement of hazards is crucial when building a course for

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public play. Sand needs to be used to define appropriate lines of play while not unduly penalizing those who stray from the preferred paths.

At Coral Oaks, for instance, players can run the ball up to every green. When golf courses are designed merely to accommodate the high "target" style of the professional's game, there are too many forced carries over sand and water. When courses are built for all-or-nothing heroic play, there is little tolerance for slack in the maintenance program. Should certain areas not be kept cut down to specifications, the golf course can quickly become unplayable.

Hills knows how to design for maintenance without sacrificing playability. At Coral Oaks this meant working with the superintendent at the outset on issues of greens speed, bunker edging and the contour mowing of landing areas and approaches to the greens.

Municipal golfers have long suffered neglect in this country when it comes to providing quality facilities. The lure of big money tempts many an architect into building glitzy, high-profile resort courses that only the richest private clubs and resorts can afford to maintain. A growing number of PGA Tour players who put their names on the blueprints of new golf courses have little interest in promoting the game from the ground up — for the entry-level and public player.

In this sense, the quite understated approach of Arthur Hills is a welcome relief from the high pressure salesmanship and hype that have come to mark the game today.

Whether at Bonita Bay or Coral Oaks, Hills knows how to work with what is already there. His fee structure and design principles are flexible enough to meet the needs of very different clients. He does not force his design upon the land, and he does not impose his own distinctive style upon an unwilling owner or superintendent.

An attention to detail and to environmental sensitivity, a willingness to work hard and to create quality golf grounds that can be maintained over the long run — these are the trademarks of Arthur Hills.

Maintenance costs threaten industry, says Maples

Golf course architects must focus on controlling construction and maintenance costs so the cost of play will not become prohibitive, says Dan Maples of Pinehurst, N.C., newly elected president of the American Society of Golf Course Architects.

"The game of golf has experienced a strong surge of interest in the past five years," he said, "and everyone associated with the design, construction and maintenance of golf courses must work to keep the cost of play within reach of the general public.

"We cannot slip back into the image of an elitist sport."

A third-generation member of the Maples family that has played an important role in golf development in the Southeast, the new ASGCA leader has excellent credentials for discussing construction and maintenance

costs.

His grandfather, Frank, was superintendent of construction for Donald Ross at Pinehurst, supervising more than 150 men



Dan Maples

who used mules to work the Carolina sandhills into Pinehurst's first four golf courses.

"My grandfather designed much of the early equipment and was very aware of how the design could be coordinated with maintenance. He taught my father (Ellis), who soon recognized that severe slopes and deep bunkers required hand maintenance, which can escalate costs in today's environment."

Ellis Maples, who was president of the ASGCA in 1974, was a life member of the PGA of America and the Golf Course Superintendents Association of America. He designed and built Pinehurst's fifth golf course.

Ellis' brother, Henson, was superintendent at Pinehurst for 30 years. Other members of the Maples clan include professional golfer Willie and superintendents Joe, Gene, Wayne and Palmer, Jr.

"Donald Ross told my father that he (Ross) probably made a mistake by designing so many courses without the opportunity to review the construction," Dan Maples said. "He told my father that, if he had it to do over again, he would only design courses that he actually could oversee. That's something that all of us should consider in this booming era of golf course development."