Practitioners cite success with ceramics

By Mark Leslie

Arnold Palmer, who wants nothing but the best for his home course, has taken the plunge with porous ceramics. Old buddy Gary Player has, too. And arguably the most agronomically knowledgeable golf course architect, Phil-car-ryng Michael Hurdzan, has been an engineer on the putting-green-sans-peat train for years.

Now, even as the debate over organics-vs-ceramics in greens mixes boils in the golf industry, more superintendents, architects and builders are venturing into the world of custom-designed root zones.

"I think there is no question porous ceramics have physical characteristics that can be used to amend a sand to

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Par-3 development gains popularity, viability

By Peter Blais

ew golfers need a place to learn the game. Developers can't find reasonably priced land for larger facilities. The solution: Build more par-3 golf courses. That's just what's happen-ing as the shorter layouts are springing up as both additions to existing courses and as stand-alone facilities throughout the country. According to National Golf Foun-

dation figures, the number of new par-3 openings increased from seven in 1989 to 24 in 1994. The most-recent figure represents 6.3 percent of the 381 courses opened last year.

"In a lot of cases, a par-3 makes sense," said Barry Frank, vice president of NGF Consulting. "You don't need much land, somewhere between 15 and 50 acres depending on the layout

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Public-access boom pushing existing courses to upgrade

By J. Barry Mothes

ORLANDO—Upgrade. Upgrade. Get used to that word. It just might be the golf industry mantra for the rest of the decade, and into the 21st century. Consider the following items from less than a week's worth of national news clippings:

• A $2.3 million upgrade is ongoing at the Salishan Golf Links, a 30-year-old resort course in Gleneden Beach, Ore. Holes have been remediated, a new irrigation and drainage system is being installed, and an 18-hole putting course is planned.

• The 27-hole, daily-fee Galloping Hill Golf Course in Union, N.J., opened in 1928, has embarked on a $4.8 million upgrade that includes a new automated sprinkler system, fairway reconstruc-tion, new tees and greens, and new cart paths.

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Ceramics have a future on greens

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a better root zone," Hurdzan said. Palmer Design Co. President Ed Seay was more emphatic. "It [porous ceramics] has marvelous qualities that will help with some very poor soil conditions," he said. "If it does what it says it will do — and what we have observed — you will be able to incorporate this material into native soil and achieve the porosity and soil qualities you need in order to grow good turfgrass and putting surfaces. And it will go beyond that. It can make a dry area moist, or dry up a wet area."

Said Seay, who with Palmer decided to renovate Bay Hill's Charger Course using Profile porous ceramic soil modifier, added: "Another beauty of it is, you need no rock and tile with it — no sub-surface drainage system."

"We're sold on it as a company," said Tim Freeland of Gary Player Design Co. "We think it's going to be fabulous, and we..." He continued, "The microbial content in the root zone. Cation exchange capacity (CEC) and pH reportedly are also positively impacted."

Player first used Profile in a renovation of three greens at River Run in Ocean City, Md., and is incorporating it into his renovation at Bay Hill. "I was sold on it," said Arnold Palmer, "because of the hard "sell" in the industry because of his doctoral degree in environmental turfgrass physiology, master's degree in turf studies and bachelor's in turfgrass management, as well as experience as a golf course superintendent. While standing firmly behind the concept of a man-engineered subsoil as a viable option, he said: "We need both. In many sands we need to use an organic matter. Sometimes we need porous ceramics. Sometimes we find sands that need neither of those two."

Sometimes organic matter is necessary to give "better body" to the sand, Hurdzan said. "But that's what the ceramic does, too. The difference is, the ceramic is not going to break down and the organic matter is going to break down. By its very nature it will go towards mineralization... To decide which is best, you send it to good testing laboratories and ask them to run a physical analysis using the different materials."

Course architects exert the most influence on developers, and "most of them have not wanted to venture out and take the risk [with ceramics]," said Roy Parker of Soils Management Technologies in Lakewood, Colo., which distributes Profile porous ceramic soil modifier for greens mixes.

"They don't have much of an incentive to do it. But now we have people who have given us a shot to get in the door..." Hurdzan said. "We're specing it in all of our courses," said Freeland. "Some clients are against it, because it's different and they feel it's a risk. We're not selling it, just recommending it."

Concerns about ceramics are diminishing. Parker said, "Nobody wanted to be the guinea pig. Well, there's no guinea pig any more. There was no tougher sell than Arnold Palmer, and he made the commitment."

"I think the fact that costs have come down have made them much more attractive," Hurdzan said. "People have experimented with them and had bad success. We have more consistent laboratory testing procedures. We have university test plots. All of these have lessened the anxiety about whether these have a place in the market. They do have a place. We just need to select it intelligently."

"The overall life of the green will be extended," Freeland said. "Too often the death of a green is because of lack of drainage. This will keep the green porous for a long time. We will have virtually no black layer."

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