## DEVELOPMENT

## **Transamerican blending micro-nutrients for jump-start**

Operating on the principle that soil and chemical laboratories are the doctors, and that soil blenders are the pharmacists, Transamerican Soil Blenders is experiencing success with a new prescription in golfcourse green construction.

Troy McNeil of Transamerican, which mixes sand and other media for golf course greens around the country, said: "We inject micro-organisms into the mix of sterile mediatospeedupthematurity of greens. Bacteria breaks down thatch."

"We're trying to take the guesswork out of it. This way, it's easier to deal with the growing profile," McNeil said.

Since fertilizers have no bacteria, companies like O.M. Scott are starting to help with appropriate changes to their product lines, he said.

"It's important that we have a C/N (calcium/nitrogen) ratio in balance. If not, it's difficult for the superintendent to maintain the turf. Keeping the growing media in balance gives the superintendent the ability to manage with ease, and we can do that from the start," McNeil added.

He said maturity "increases the capacity of turf to heal from

spike wounds, et cetera.

"And, like body chemistry, if it's in perfect balance it can heal quickly. The green, especially in the early stages of development, is the same. If the pH is out of balance, for instance if it's below 6.5, you've got disease problems."

Number of rounds played, he added, is "the bottom line on a course."



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normal, and they face localized dry spots.

"My biggest problem is isolated dry spots daily," Perry says. "With pronounced slopes on some greens, and a lot of wind on the course, I will have problems with dry spots."

Madden says sand tends to form isolated dry spots and can become hydrophobic — fighting water. Yet, he adds, using sand uncomplicates the matter. You're not introducing a foreign element that has to be a perfect mix. For the long haul, it's going to work out for you."

Hurdzan says: "All greens are susceptible to localized dry spots, regardless of how they are built. I've seen localized dry spots on university turf plots using every type of rootzone mix imaginable, and most often hand-mixed in small batches. I see about 100 courses a year and, during certain times of the year, most of them have localized dry spots."

As for higher fertilizer costs, Perry says: "We use organic fertilizer continually because, with allsand greens, you use a lot of fertilizers... We will require 15 to 20 pounds per 1,000 square feet of nitrogen per year compared to the typical six pounds.

"My green fertility program has 15 different types of products. The program costs at least double the normal green. It costs \$10,000 a year compared to \$4,000 to \$5,000, plus extra labor and spot watering."

"Joe makes a good point," says Hurdzan, "but an extra \$300 per green compared to the initial saving, plus the dependability of these greens, seems like a small cost.

"If my client saved \$150,000 or more in initial construction, he doesn't mind buying an extra \$5,000 in fertilizer for the first couple of years. After that, these greens perform the same as greens constructed by other methods, for they have produced their own organic matter."

Madden says he is using more fertilizers and micro-nutrients projecting a rate of seven to nine pounds per thousand square feet.

But Scharenberg likes the idea of being able to fertilize greens "as much as you want during grow-in because the sand percs so quickly. Iuse quick-release fertilizer. It keeps the price down and the fertilization up. You can make 2-1/2 times the applications for the price of one slow-release application."

Wadsworth's Eldredge says it's basically an economic decision.

"It's the developer's decision. Is it worth eliminating the mixing operation and cost of peat? Or is it cheaper to spend more on water and nutrients?" Eldredge says.

## FEAR AND OPEN-MIND FACTORS

Hurdzan and Eldredge say architects and builders have been afraid to use greens construction techniques other than USGA recommendations.

"Architects have to recommend to do what the USGA tells them, or Continued on page 37

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