Quarry Hills calls globetrotting Kessener back to his roots

QUINCY, Mass. — After roaming the globe building golf courses most of his life, Massachusetts native Gary Kessener, 42, has returned home to oversee construction of one of the most ambitious golf projects ever undertaken in the United States — Quarry Hills Golf Course.

"It's a fascinating project," said Kessener of the 27-hole John Sanford-designed layout being built over three former landfills, a few miles from downtown Boston. "It's great to be able to do something like this where I grew up."

Quarry Hills developers Chuck Gellich and Bill O'Connell reviewed more than 50 resumes and interviewed a half-dozen applicants before selecting Kessener. "We needed someone who had extensive grow-in and building experience," Gellich said. "Gary fit the bill. He's built 30 or more courses and started out running a bulldozer and planting trees by hand. He's been chipping and processed, with the longer fibers extracted to make paper. Fibers too short to use become a waste product. At Quarry Hills, one part short paper fibers are being mixed with one part sand and a quarter part organic slow-release fertilizer pellets produced at a nearby sewage treatment plant. The result is an organically enriched material New England Organics has trademarked as BioMix. The short paper fibers provide valuable organic matter that improves soil structure, retains

Manufactured topsoil solving many problems at Quarry Hills GC

QUINCY, Mass. — With native topsoil both expensive and scarce, Quarry Hills is manufacturing its own topsoil to cover much of the 27-hole John Sanford-designed course under construction in suburban Boston. Manufacturing its own topsoil? That's right.

Working with Falmouth, Maine-based New England Organics, Quarry Hills is mixing sand, organic pellets and short paper fibers (SFPs) — recovered paper fibers generated by paper mills — to produce a high-quality loam that is erosion-resistant, weed-free, water-retentive and about 40 percent less expensive than native topsoil, according to superintendent Gary Kessener.

Quarry Hills is covering three landfills with more than 800,000 truck loads of excavate from the tunnel under construction in Boston known as the "Big Dig." The configuration of the landfills, coupled with the large amount of fill, has created steep slopes on the site.

"The idea was to find a way to stabilize all these slopes and retain moisture to promote plant growth," Sanford said. "This has proven to be very useful and cost effective, and it provides a way to use recycled product."

During the manufacture of paper, wood is

MAINTENANCE

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Selecting a bentgrass cultivar for greens takes research

By KEVIN ROSS

When Penncross bentgrass first became available in 1956, little did anyone know the standard this grass would set for more than 40 years. Penncross is still the best-selling bentgrass in the world — more than a million pounds are sold annually worldwide — but slowly things are changing.

Today's bentgrass market has more than 30 to choose from. With this many cultivars the question arises: which one should you choose?

A good starting point is the National Turfgrass Evaluation Program, or NTEP. Throughout the United States, turf trials are set up at various universities. These bents are evaluated and results are compiled and published.

What does this data tell you? Should you just select what's rated number one? No, this data is merely a starting point. Maintenance practices are different at each NTEP site, so it is important to know a few of the vital inputs, such as mowing heights, topdressing frequency, cultural practices, fertility amounts and watering.

At the NTEP Web site (www.ntep.org), you can dig into data that will help you to see if a bent is suited for your conditions. The best way to look at bents that may perform for your conditions is to compare test sites that match your situation. This gives a better idea of its performance relative to your conditions.

Also, on the Web site, you can compare how bents will

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Topsoil
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moisture and increases nutrient-holding capacity. Additionally, because it is a mixture of sand and tree fibers, the manufactured soil is weed-free, unlike traditional loam.

But one of the biggest advantages, particularly on a steep site like Quarry Hills, is the ability of the paper fibers to stand up to heavy rains that would normally wash away large amounts of topsoil and seed. The manufactured soil even outperforms erosion-control blankets often placed over newly seeded areas, Kessener said. A half-acre test slope planted at Quarry Hills has remained lush and weed-free, while a neighboring slope covered with regular topsoil has been eroded and dominated by weeds.

"This material could save builders a lot of money," the Quarry Hills superintendent said. "The top six inches become almost sponge-like, absorbing and holding water. If you put it in unirrigated areas that's a big benefit."

SEED GERMINATION QUALITIES

In addition to its application on Quarry Hills' dramatic site slopes, BioMix will be used in the fairways. Kessener is spreading roughly 1.5 inches of the manufactured soil over the 10 inches of existing fairway soil and then rototilling it down to a depth of six inches. The only place BioMix won't be used is on greens and tees.

The manufactured soil costs $5 to $6 per yard, about 40 percent less than the $10 to $15 per yard for traditional loam. And it is mixed on site.

"It's quite incredible," said Quarry Hills developer Chick Geilich. "We've done a lot of experimenting with this material and have come up with a mixture that works quite well."

Grass seed germinates more slowly in the BioMix soil than in traditional soil, lagging behind by three to seven days, according to New England Organics business development specialist Pat Ellis. But it catches up within several weeks. And the erosion resistance of BioMix means far more grass seeds eventually germinate than with traditional loam, he added.

PROXIMITY TO SOURCE CRITICAL

"Transportation is the major cost. "Trucking anything a long distance can kill you financially," Sanford said. "To be cost effective you have to be within a reasonable distance of a paper mill."

Paper companies are abundant throughout most of New England, New York, Michigan, Wisconsin, Alabama and the Pacific Northwest, making manufactured soil a potential product for those areas.

At Quarry Hills, Kessener is using 80,000 cubic yards of BioMix on the side slopes and 22,500 yards on the fairways. Ellis estimates New England Organics could provide 200,000 to 400,000 yards of material annually.
“DOMINO EFFECT”

As golf course superintendents in the Northwest fire up their irrigation systems full steam for the peak summer season, California superintendents are awaiting to see how their own operations will fare this season. The Bush administration has rejected the idea of placing price controls on wholesale electricity sold to western states.

“It's not fair to us in the Northwest, when somebody wanting to turn on a hot tub in California does it without fear of paying increased costs,” said Rep. Jennifer Dunn, R-Wash.

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