

The club has recycled 8 tons of cardboard using this compacter. Photo by Joe Hubbard

Going Green Can Save Lots of Green

Broken Sound Club Reduces its Carbon Footprint, Saves Money in the Process

By Shelly Foy, USGA Green Section

The motivation for undertaking projects often starts with one high-energy person. John Crean, general manager of the Broken Sound Club in Boca Raton is a knowledgeable, charismatic leader who is reducing energy costs, and therefore the carbon footprint of his club. Crean is not only looking for energy efficiency and fiscal economy, he always has protection of the environment in the back of his mind.

What do you do when you realize your cost for waste removal (i.e. dumpsters) approaches \$120,000 a year? Crean, along with Cathy Grana, assistant general manager, implemented a strict recycling program for the club. They eliminated polystyrene foam products and plastic water bottles, while also recycling cans, plastic, and

cardboard. To date, they have recycled eight tons of cardboard and two tons of plastic. The club is paid for the material they recycle, which helps offsets their pickup costs.

Sometimes you have to get creative and even learn through trial and error. The club wanted to stop using foam, so they tried a biodegradable "ecotainer" cup bit thorough research showed that the energy costs to make them was not friendly to the earth. They decided to use recyclable plastic cups, which posed a new challenge: the plastic cups sweated and dripped all over golfers.

With feedback from head professionals Scott Feller and John Skaf, Crean found a "koozie" that holds the plastic cups and fits into the golf cart's built-in beverage holders; but golfers found that the koozies came out of the holders with the cups.

A grommet to hold the koozie in place solved that problem. When cleaning out the carts, employees remove the plastic cups and place them in the recycle bin.

But recycling wasn't Crean's only focus. Can you imagine Broken Sound's power bill with 86,000 sq. ft. in two clubhouses? One of the first steps was to replace the majority of light bulbs with compact fluorescents. They are anticipating measurable energy savings this year from just this one step.

Broken Sound had nine water heaters powered by natural gas. Crean learned that by replacing them with solar water heaters, the club could save \$15,000 a year in natural gas. Each solar water heater cost \$4,500 to install. There is a tax credit from the IRS of \$2,000 for each heater and Florida Power and Light offered a \$500 rebate per heater. Broken Sound's investment will pay for itself in a little over a year.

Under the watchful eye of David Payne, facilities maintenance manager, solar panels were recently installed on the pool heaters, with an anticipated saving of between \$10,000 and \$15,000 a year. Not only was the choice of solar power good for the environment, it will result in significant savings to the club and considerably reduce its reliance on natural gas.

Broken Sound's board of directors may approve a \$400,000 investment in digesters (compost units) if a threemonth test proves successful.

On the day of my visit to Broken Sound, Tropical Treescapes, Inc., was picking up all of the food scraps and grass clippings mixed with palm fronds from the golf course to put in a test

38 THE FLORIDA GREEN

digester in Miami. They are seeking the right combination of materials to produce organic material that could be used as compost fertilizer on the fairways and roughs.

If the digester test works and Broken Sound proceeds with the investment, not only will the club be one of a handful in the country to produce their own composter fertilizer, Crean expects to save \$65,000 a year solely on reducing garbage and debris pickup. With golf course fertilizer costs increasing 80 percent since January, these digesters could potentially give the club a 33 percent reduction in fertilizer costs and water consumption over a period of two years.

In addition, if the 15-ft.-high, 50-ft.by-8-ft. digesters are put into place, there is a plan to purchase debris from landscapers working within the club property, place this material in the digesters, and then sell the composted material back to these companies. If all goes well with this project, it won't take long for the club to recover the cost of this investment.

The Broken Sound Club also is working toward certification in the Audubon Cooperative Sanctuary for Golf Courses. Joe Hubbard, CGCS, director of golf maintenance over both courses, is looking eventually to naturalize many areas, also resulting in cost savings. More than 60 bird species can be found at Broken Sound, and, since one of Hubbard's passions is photography, many of his photographs are featured on the cover of the club's bimonthly newsletter, as well as a few national magazines.

Efforts to conserve resources and save money do not come without a lot of serious thought and research. A future investment in solar golf carts already is under discussion. Although the technology is not quite practical yet, Crean believes it soon will be. He also mentioned a company in Utah that has



If this demo composter works, Broken Sound might save \$65,000 in garbage and debris hauling fees. Photo by Joe Hubbard.

developed solar roof panels that look like shingles, and the hope is that solar panels will become available in barrel tile shingles, which Broken Sound currently has as roofing material for the main clubhouse.

Clubhouse Manager Ed Chichielo, Food and Beverage Manager Tim Nel-



MERIDIAN MANUFACTURING GROUP

SANDSTOR

- *Keeps Dried Sand Dry
- *No Waste or Contamination
- *Delivered Fully Assembled
- *2 Models 30 or 50 Ton
- *Cage Section & TopRailOptional

Rymatt Golf, Naples, FL (239) 513-9238



son, Membership Director Maureen Schreiber, several other department heads, the members and entire staff have embraced the energy conservation programs under way at Broken Sound. Having the desire to do the right things for the environment – taking time to

Drink koozie inserts in cart beverage holders enable use of biodegradable plastic cups. Photo by Joe Hubbard. research energy conservation programs – and becoming knowledgeable about these topics are obviously important. John Crean's message is that you can do the right things for the right reasons and save money at the same time. Being able to save money for your club can be called job security; saving energy and doing the right thing for the environment is just icing on the cake.

Tifton Physical Soil Testing Laboratory, Inc.

Accredited by the American Association for Laboratory Accreditation (A2LA)

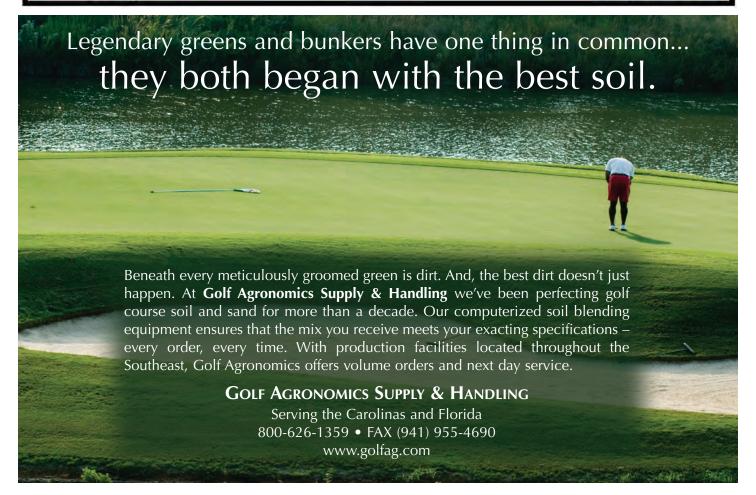
Specializing in:

- · Testing All Materials for USGA Golf Green Construction.
- · Developing Putting Green Rootzone Mixtures that meet USGA Specifications.
- Recommending Topdressing and Bunker (Trap) Sands that meet USGA Specifications.
- Developing Sportsturf Rootzone Mixes with Optimum Physical Properties for Athletic Fields.

1412 Murray Avenue Tifton, Georgia 31794



T. Powell Gaines (229) 382-7292



FALL 2008 41