Waste Not Want Not

How To Recyle Food On Your Course And Save

THE REALITY

Every year, more than 70 million tonnes of food waste finds its way into landfills, attracting pests and creating unpleasant odours and toxic liquids. The methane gas produced by this organic food waste is 20 to 25 times more toxic to our environment than the CO2 emissions from our vehicles. Fortunately, a new product provides a solution that turns food waste into a compostable, humus-rich soil amendment perfect for fertilizing turf grass, plants, and flowerbeds. For most courses, this simple-to-use green solution will quickly pay for itself in the form of reduced waste-hauling costs and in savings on fertilizer for the grounds.

This new food waste recycling technology comes at a time when more and more North American jurisdictions are banning food waste from their landfills. The new regulation in Nanaimo, BC, enacted in 2005, diverted 6,000 tonnes of food and other compostables. As this trend inevitably moves eastward, it may catch many golf courses off guard. It makes sense to invest in alternative technology now, if feasible. At the very least, golf courses should begin planning for such an investment in the near future. After all, the sooner the equipment is installed, the sooner a facility can begin to recoup its initial outlay.

In addition to the cost savings on truck hauling and fertilizer costs, food waste recycling can pay off in other important ways. Research has shown that customers are increasingly choosing businesses that support green solutions. Making sustainability a core element of a course's branding efforts will result in a competitive distinction in the marketplace. The resulting positive publicity, goodwill, customer loyalty, and extra business should contribute to a healthier triple bottom line.

FROM TABLE TO TERRAIN

Food waste recycling is a process that turns potentially harmful food scraps into safe, sterilized, odour-free compost that can be reused onsite by golf courses. In most cases, the recycling equipment will pay for itself over time, more than justifying the initial outlay. How quickly this can be accomplished depends on: the volume of food waste a course's food outlets produce, the associated hauling costs, savings on fertilizer, and the number of composting machines needed to process the waste.

For example, a golf facility producing 250 pounds of organic food waste daily, could save as much as $10,000 per year on waste hauling costs, which justifies the cost of the composting equipment which averages approximately $27,000 for a commercial-grade processor. Factor in the savings on fertilizer, and it's easy to see how the return on investment is achieved.

Many golf courses that serve food, especially resorts with large-scale restaurants, are discovering that the disposal of organic food waste is becoming increasingly difficult. One option that is available to golf course owners is called the Food Cycler, a product that turns food waste into a compostable, humus-rich soil amendment perfect for fertilizing turf grass, plants, and flowerbeds. The Food Cycler takes kitchen leftovers and turns them into a humus-rich "foodilizer." This eliminates the need and the associated expense of hauling away excess food scraps. Since the waste is reduced by as much as 93% and the residual is reused, food waste recycling is considered a zero-waste solution.

THE FOOD CYCLER

The Food Cycler, produced by the Ontario based company, Food Cycle Science, is one option for golf courses interested in organic waste management. To understand the

Before & After: Finished compost material (left) beside the organic food waste (right).

Staff easily adds the organic food waste into the top of machine to be processed.

The Food Cycler with the finished product.

The compostable, humus-rich "foodilizer" is now ready to be transported outside of the kitchen to be used as fertilizer for turf grass, plants and flowerbeds.

patent-protected technology behind the company's Food Cycler, think of it as composting on fast-forward. The kitchen staff feeds table scraps into the decomposing chamber of a stainless steel, stand-alone unit. Through a multi-stage cycle, the organic matter is then heated to 180°F, dehydrated and reduced by as much as 90% over a 14-hour period. Larger loads up to 3,300 pounds may take as much as 24 hours.

The recycling process requires no use of enzymes, wood chips, fresh water, or venting and uses very little energy. A unique, patented odour-control system keeps the kitchen free from unpleasant fumes. At the end of the cycle, the remaining 10% residual can be classified as a sterile biomass, suitable as a viable soil amendment. Simply put, it can be used like fertilizer on a facility's grounds. In addition, the potable water from the dehydrating process can also be reclaimed for use in landscape irrigation.

The results are visible at La Costa Resort and Spa, the up-scale golf resort located in Carlsbad, California, USA. La Costa employs the Food Cycler in both its restaurants, using the residue to enhance the grounds' lush vegetation and gardens. Each day, this equipment produces approximately 40 pounds of compost that is given to the grounds crew for use around the property.

"La Costa is continually looking for ways to minimize consumption and waste without detracting from the quality of our guest experience," said April Shute, vice president and general manager. "The compost machine is a great example of how we accomplish this goal. It allows us to turn 182,000 pounds of food waste per year into a product that ultimately enhances the beauty of our resort."

Hans Weigand, La Costa's executive chef, is equally impressed. "With the exception of bones and a few other items, just about anything can be used in the compost machine. It's been fun experimenting with what goes into the machine to produce the best compost product. We created the La Costa recipe: two parts vegetable scrap from the kitchen, one part banquet scrap, and one part table scrap from the restaurants."

Due to the patented odour-control system, the Food Cycler unit can be installed in or adjacent to the kitchen with no concerns about unpleasant smells fouling the guest experience. The company's recyclers are available with throughput capacities ranging from as small as 65 pounds up to 3,300 pounds. For a typical 18-hole course not tied to a resort, one 250-pound machine should suffice. A resort with two restaurants, like La Costa Resort and Spa, would require two 250-pound machines.

GOODWILL PAYS

For most golf courses, the investment in food waste recycling can be considered an investment in the future—both the course's future and the planet's. The initial investment in equipment will not only be recovered in reduced hauling costs, but also by reusing the residue as soil amendment. The goodwill generated by voluntarily reducing waste before forced to do so by mandate should not be underestimated. Food waste recycling presents golf courses with an exceptional opportunity to profit from doing what is right, which is something that your golfers will appreciate.

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