

EDIBLE INSPIRATION SPRING 2013

By Edible Monterey Bay

Garbage to Gold

Monterey Peninsula restaurateurs aim to go zero waste—and at the same time, fight global warming and turn their food scraps into green power and natural fertilizer

By Elizabeth Limbach

Photography by Patrick Tregenza

A few years ago, a Carmel Valley pig rancher approached the Monterey Bay Aquarium Café & Restaurant with a practical request: Might he take the eatery's food scraps to feed to his pigs?

The aquarium gladly agreed. But after a brief symbiotic relationship, the farmer stopped collecting and the restaurant was stuck with its leftovers once more. When Michael Seaman came on as the restaurant's environmental and product manager in June 2011—with a charge to green the business—he looked unsuccessfully for another outlet to fill the farmer's shoes.



"It was tough to get someone to take our food waste," says Seaman. For a business concerned about its trash output, the alternatives were to pay a high price for special pickup or to compost the scraps themselves at an on-site garden—neither of which were options for the restaurant.

The aquarium's desire to divert its food scraps from the dumpster reflects a growing awareness that most of what is pitched into United States landfills is compostable organic refuse. This is not just wasteful; it wreaks havoc on the environment because the methane produced by decaying food makes our dumps the ninth biggest source of greenhouse gases. What's more, methane is more than 20 times more harmful to the atmosphere than the carbon dioxide that most of us worry about producing.

With a full 46% of what the average restaurant tosses being food waste, our local conservation-minded restaurants are realizing that how they handle their leftovers has a critical impact on global warming.

The good news is that Seaman and other local restaurateurs, food retailers and hoteliers, together with government and trash collection entities, have taken action and put the peninsula on the front lines of the food waste fight. (Read about Santa Cruz County's efforts in the sidebar on p. 41.) And it is not a minute too soon.

Journalist Jonathan Bloom blew the trash can lid off of the food waste issue in his 2010 book *American Wasteland*, reporting that as much as half of the food in this country is thrown away. To illustrate, he paints the terrifying image of the Rose Bowl filled with stinky heaps of rotting food—because it would take a stadium that size to hold the 590 billion pounds of food Americans toss

each year. The book traces the food waste epidemic all the way from farm fields and grocery store shelves to household habits and restaurant kitchens. While Bloom doesn't think the problem will ever go away entirely, he believes that America's appalling food waste could be cut in half if enough people did something about it.

"One man's garbage is another's gold mine," says Ted Terrasas, Monterey's sustainability coordinator. "It's just a matter of changing those perspectives people have and getting away from that throw-away society."

The City of Monterey and Waste Management Carmel-Marina Corp. both launched pilot commercial food waste pickup programs last year. Much like recycling pickup services, the programs have enabled participating businesses to do what Seaman and others have been longing for at an affordable cost, and the programs are expected to continue after their pilot periods end. Meanwhile, an anaerobic food digester—the first of its kind in the country, although popular in Europe—has just gone online at the Monterey Regional Waste Management District (MRWMD) site in Marina. The digester, as it is called, will convert commercial food waste collected in Monterey and Santa Cruz counties into energy and compost.

Making it happen

As early as 2008, Asilomar Conference Grounds and the Monterey Whole Foods Market were culling their food waste from the rest of their garbage and had begun making special arrangements to have it taken away and composted at the regional waste facility in Marina.

But the ad-hoc arrangements were costly and inefficient for both the haulers and the customers, and the push to make collection of food scraps an official part of waste recovery services available to peninsula businesses really gathered steam in 2011.



Seaman, who was then working as the environmental programs assistant for Aramark at Asilomar, joined forces with other local businesses, nonprofits and government officials with the same interest. This group, now known as the Monterey Peninsula Food Scrap Resource Recovery Coalition, lobbied local city councils to get on board.

The City of Monterey, through its waste hauler, Monterey City Disposal Inc., began offering food waste pickup on a pilot basis in October 2012 and as of late January had four participants: the aquarium's restaurant, Inter Continental The Clement Monterey, Whole Foods at the Del Monte Center and the Portola Hotel & Spa.

Six weeks into the program, Seaman says that the aquarium was sending about 400 pounds a week of food scraps for conversion to compost and power and the composting effort may spread from the restaurant to the rest of the aquarium—meaning fish heads and guts left over from feeding the animals could someday also be redirected from the dump.

Waste Management's program started last September and is available to businesses in Carmel, Pacific Grove, Seaside, Sand City, Del Rey Oaks, Marina and Pebble Beach; Monterey County's unincorporated areas may soon be able to participate as well. As this issue of *EMB* went to press, the program had 10 customers,

including: three Pebble Beach Co. properties, Asilomar, Happy Girl Kitchen Co., Passionfish, Canterbury Woods, Basil, Bernardus Lodge and Bayonet and Black Horse.

In just the four months the program operated last year, Waste Management collected and composted more than 150 tons of discarded food, says Joe Cadelago, Waste Management's government and community relations representative.

Both of the food waste recovery programs run at no cost to the cities covered by the routes, and at a cost comparable to garbage pickup for participants. And as more businesses sign up, costs are expected to fall.

A new mindset

Of course, reducing food waste and its ills begins with throwing away less food in the first place. Richard Julian, purchasing manager at the InterCon, says the hotel's first line of attack is striving to know what it needs and being cautious with its orders of perishable foods.

"It's smart shopping, but it's also smart cooking," Julian says, adding that the hotel's chef, Jerry Register, keeps waste to a minimum by avoiding making more food than is needed.

In a 208-room hotel that boasts a 125-seat restaurant and bar and hosts more than 100 banquets per year, however, some food waste is inevitable. With this in mind, and some urging from the City of Monterey, the InterCon, a certified green business, began composting one year after opening, in 2009. "When you are a brand new hotel, it's a lot easier to teach someone right off the bat than doing it five years later," Julian says. "We'd already started [a] recycle program, we'd started the momentum, so why not make composting part of the mix?" The omnipresent green food scrap cans have stood beside gray trash receptacles and blue recycling bins ever since.

On a recent Sunday afternoon, Julian winds his way through the hotel's culinary barracks, peeking inside the strategically placed green garbage bins. Sporadic laminated posters remind employees what goes in which bin. In the restaurant's open kitchen, where cooks are busy frying burgers and arranging plates, a food scrap bin is always within reach. A look inside one of these vessels reveals a mound of uneaten French fries, corners of bread, vegetable bits of varying size and the unrecognizable remains of other dishes.

Before the pilot program began—and participants received official food waste bins—the hotel's food refuse amassed in a large compactor, which made the hotel's loading dock notoriously odorous. Now, Julian utilizes 10 city bins that are easily and routinely cleaned, and he expects to be able to use even more as time goes on.

"With today's food scrap program, it's easier, cleaner, a little less expensive, but much more efficient and less of a smell," Julian says.

Like concerns about cleanliness (and with that, fears of infestation), another potential impediment to bringing on new participants is finding the space for all those bins. The Inter-Con is immune from that worry, thanks to its spacious loading dock. Waste Management addresses both the cleanliness and space issues with thrice-weekly pickups, but the city picks up just once, and Julian acknowledges that the space issue is real.

“Some businesses are much smaller,” Julian says. “I know we’re a big hotel. I get it. The little restaurant down the street may not have enough space for the trash bins, the re- cycle bins and the food scraps bins.”

One floor below the restaurant, in the InterCon’s main kitchen, Julian spots a crumpled wad of paper in a compost bin, evidence of the overarching challenge cited by all involved parties, which is helping rushed employees get in the habit of discarding food into its own container.

“It’s easy to get the bins, but you have to make sure your employees know why it’s important and how to do it,” says Seaman, who had heard from the hauler earlier that day that a plastic glove was found in his food scraps.

“What we’re really concerned about is making sure that we get a very nice clean waste stream, [and having people] understand that it needs to be separated,” says Terrasas.

Separating food waste is common sense for Soerke Peters, the owner-chef of Basil in Carmel, which is a participant in Waste Management’s program. Peters did a culinary apprenticeship in Germany, where composting was the norm. And although that was decades ago now, Peters says he still finds the habit comes second nature.

To reduce waste on the front end, Peters waits until after closing at night to place his orders for the next day so that he can first inventory what the restaurant still has on hand. “We only buy what we need,” he says.

Separating food scraps easily became part of the routine (the staff picked the habit up in about a week, Peters says), but he was surprised by how much waste the restaurant was actually producing.

“I’m shocked, actually,” he says of the amount. “I thought it would be very little. I mainly thought it’d be plate leftovers, and people don’t usually leave much uneaten on their plates. But it adds up very quickly with things like potato peels, which you don’t re- ally think about. It’s quite a bit.”

Leftovers: a valuable commodity

At the heart of this challenge is the need to see the food that used to be thrown away as some- thing of worth, says Abbie Beane, director of sustainability programs for The Offset Project, a nonprofit based in Pacific Grove.



“People can easily see plastics, metal and aluminum as a resource because it’s en- grained,” Beane says. “Why does [food waste] come second? And why don’t we think about it? Maybe it’s because people don’t see food—old food—as a resource.”

The Offset Project, along with the City of Monterey and Monterey Disposal, received a Community Foundation grant at the start of the year to provide training and education to participants in the city pilot program. “It’s a tough thing to convince people of, because it’s an extra step in the kitchen,” says Beane. “It can be extremely

messy—people are afraid of critters and maggots—and there is confusion over what can be com- posted. Unless you're helping people through this, it's easy to abandon it.”

In order to get the practice up and running efficiently, she adds, “You really need boots on the ground every single week for a certain number of hours. ” The Offset Project will dedicate time and staffing to providing this advice and training, and will also facilitate four workshops this year.

But despite all the concerns about pests and sanitation, food waste is in truth a relatively pure waste stream.

“That's the good thing about food waste—we can recover all of it if we're good about separating it,” says Terrasas. “It's not a toxic material or chemical or metal. It's food.”

MRWMD's facility in Marina has been doing some composting using traditional windrows since 1986 and began food scrap composting five years ago.

In January, the site christened a cutting- edge facility for processing its waste: an anaerobic digester that can convert up to 5,000 tons of organic matter into heat, energy and compost.

The “SMARTFERM” plant is on loan from Zero Waste Energy, a solid waste management company that approached MRWMD about locating the facility at the

Marina location on a pilot basis. The digester reduces greenhouse gas emissions by converting food waste- produced methane into energy. It's the first such plant to be built in the U.S., although many others are in development and a much larger one is being built nearby, in San Jose.

The Marina plant—a four-unit modular white installation with hot pink doors—allows local businesses to participate in a closed-loop waste cycle. Food scraps are turned into electricity that is sold to the Monterey Regional Water Pollution Control Agency and compost that will be offered for sale to local growers, especially vineyards and non-row crop farmers.

“It is important to push for these pro- grams because they benefit not only the environment, but also every participant in the process,” says Al Hittle, director of engineering for Portola Hotel, “[including the] waste generator, waste hauler, landfill operator, com- post operator and end user of the compost.”

So what is ahead? Officials with both the City of Monterey and Waste Manage- ment acknowledge that they need to ramp up participation to make the programs viable. Waste Management, for example, will need to quadruple its participation to about 40 customers for a “truly sustainable program,” says Cadelago, but he's not worried. “We do know the customers love the service, primarily because of the added diversion and the greening of their business.” Monterey's Terrasas says that the city is committed to making its program work.

“Food waste is a major component of what is still going to landfills as waste, so rather than abandon it if there is not sufficient participation, we would rather re-evaluate our outreach and education to make the program a success,” Terrasas says. Both expect their programs to continue—and hopefully expand to providing food waste bins and collection routes to residential customers. As Cadelago says, “Collecting food waste and turning it into energy is the new frontier of resource recovery.”