Wednesday, April 1, 2009

S.F.'s scraps bring joy to area farmers

Jane Kay, Environment Writer
The Chronicle


Kim Komenich / The Chronicle

Every morning, garbage trucks swing by the Hotel Nikko, the Palace Hotel and MoMo's, picking up food left on dinner plates and in San Francisco chefs' kitchens. Green crews hit neighborhoods from the Mission to the Sunset, collecting oatmeal, chicken bones and dead tree leaves.

About 2,000 restaurants, 2,080 large apartment buildings and 50,000 single-family homes have embraced the city's environmentally friendly green bins. The scrap is turned into gold, a rich compost that boosts the region's bounty of food while curbing carbon dioxide in the atmosphere.

San Francisco's garbage and recycling companies are leading the way in producing a high-quality, boutique compost tailored for Bay Area growers, experts say. In one year, 105,000 tons of food scraps and yard trimmings - 404 tons each weekday - get turned into 20,000 tons of compost for 10,000 acres.

The compost is in such demand from nearby growers of wine grapes, vegetables and nuts that it sells out at peak spreading season every year.

One big payoff comes from the crops that return to feed the Bay Area, making a full circle of food returning to food. The composted crops are sold in farmers' markets to restaurants such as Chez Panisse in Berkeley and in wine made by Sonoma and Napa vintners.

Reducing waste

Returning decaying organic matter to the soil also helps San Francisco meet a state law that requires cities to reduce waste going to landfills. The move also keeps plant and animal material out of the dumps, where it decomposes and emits methane, a greenhouse gas, and can leak into water supplies.

The city's success in the world of waste is attracting attention as a model for other cities, experts say. Meanwhile, Mayor Gavin Newsom is expected to take an ordinance to the Board of Supervisors that would make composting and recycling mandatory for all residential and commercial customers and levy fines of up to $500 for repeat offenders.

San Francisco has a self-imposed goal of diverting three-quarters of its waste from landfills in 2010. Food scraps thrown in black garbage bins make up about a third of that.

Other Bay Area counties are revving up green waste collection. Waste Management picks it up in Oakland, Hayward and other East Bay cities and sends it to commercial composters.

GreenWaste collects in Sonoma and Santa Clara counties and creates a compost for sale to growers and gardeners. The organic material that Allied Waste Management Services picks up in parts of Alameda and Contra Costa counties is used as landfill cover.

San Francisco's compost is sold under the brand of Jepson Prairie Organics, a subsidiary of Norcal Waste Systems, the parent company of employee-owned Sunset Scavenger and Golden Gate Disposal and Recycling Co.

Farmers can't get enough of it, they say. At Green String Farm outside Petaluma earlier this month, farmer Bob Cannard turned piles of the San Francisco compost that he's been buying for three years. He sells vegetables to Chez Panisse and Eccolo in Berkeley, Quince in San Francisco and a dozen other local restaurants.

"Send us your scrap, and we'll send it back to you as food," said Cannard. "We can't do it ourselves."

He uses the compost at the 138-acre farm, which supports a year-round fruit and vegetable market, and at a 30-acre home farm in the Sonoma Valley. The compost also goes to the vineyards of Jacuzzi Family Winery and Cline Cellars, which he manages with Fred Cline. In addition, Cannard runs an institute that teaches young farmers how to produce food for local residents and restaurants.

Collecting scraps since 1996

Sunset Scavenger began collecting greens for compost in 1996 at the city's wholesale produce market east of Bayshore Boulevard. Soon after that, Golden Gate Recycling started picking up food scraps at downtown hotels and restaurants.

Norcal set up a yard to make compost east of Vacaville, and it sells San Francisco gold for about $12 a cubic yard or $480 a truckload, plus transportation costs.

Two popular organic farms that sell at the Ferry Building and deliver to customers, Eat Well Farm near Dixon and Capay Fruits and Vegetables near Winters (Yolo County), started buying the compost. In three years, Eat Well had healthier plants and higher yields, and Capay's heirloom tomatoes looked like melons.

San Francisco's compost - brewed from a diverse mix of crab shells and shrimp tails from Fisherman's Wharf restaurants, coffee grounds from cafes and broccoli leaves and chard ends from residences - builds a healthy soil that fertilizes plants, retains water, fights disease.

The rich soil also stores carbon, the most common greenhouse gas of all.

More than 120 vineyards have used the compost, including early customers Chateau Montelena in Calistoga, Far Niente in Oakville and Saintsbury Vineyard and Baldacci Family Vineyards in Napa.

But, say agronomists, the compost works magic if it is used with other farming tricks such as planting resting fields in the off-season with peas and beans that take nitrogen from the air and fix it in the soil. Farmers mow the legumes and till them before planting commercial crops.

Taking that extra step helps build big root systems, which go deep in the soil and increase the amount of carbon stored there, said Bob Shaffer, former president of the North Coast chapter of California Certified Organic Farmers who consults with dozens of growers.

Adjusting the recipe

Three years ago, Shaffer started working at Jepson Prairie Organics to adjust the compost recipe, adding a few minerals and other ingredients. The food-scrap compost, which is separate from yard-trimming compost, is also made for wine grapes and other crops.

By some estimates, a plant exudes half its total weight in carbon into the soil, and the carbon is captured by beneficial bacteria and fungi.
"The plant has a tremendous ability to take carbon from the air and put it into the soil where it's stored in the form of humus, stable organic matter," Shaffer said.
Jepson Prairie is winning raves from scientists who know the compost game. For the past 20 years, Will Brinton, a Maine agronomist at Woods End Laboratories, has been testing soil and compost for California farmers.
Good soil is the best tool for fighting global warming, he says, because it's the largest reservoir of Earth's carbon.
"San Francisco has surpassed everybody with the attention to detail and the quality of the compost," Brinton said. "We tried to do the same thing with New York City," but getting citizens to separate green waste has "been a struggle."
Brinton is not surprised that San Franciscans have responded to the call for compost. "Of course. We want to keep our lifestyles, and we know there are many unsustainable aspects," he said. "People are showing that they want to turn this big ship in another direction."
San Francisco's compost by the numbers

- 150,000 - Tons of food scraps and yard trimmings picked up in San Francisco each year
- 50,000 - Single-family homes in the city using green bins to dump compostable waste
- 20,000 - Tons of compost produced from city waste under the Jepson Prairie Organics label
- 10,000 - Acres conditioned by the city's compost each year
- 4,080 - Restaurants and large apartment buildings that are recycling food scraps
- $12 - Price farmers pay for a cubic yard of San Francisco compost

Benefits of compost
What it is: Compost is created from the decomposition of plant and animal life such as leaves, grass, wood, garbage, natural fiber, clothes, hair and bones.
Good for soil: Compost improves the structure of soil, making it more able to contain air and water and resist erosion. It also provides nutrients for plant growth and increases storage of carbon.
Bacteria and fungi: Microscopic organisms in the soil decompose, or digest, the decaying matter in a process that creates warmth in the compost pile.
Storing carbon: Bacteria pull in oxygen from the air, forming carbon dioxide. What the bacteria can't digest is called humus. Most of the carbon in soil is stored in humus, or stable organic carbon. Humus and the carbon it sequesters remain in the soil as long as 1,000 years.
Where to buy: Gardeners can buy San Francisco's compost at Sugar City Building Materials in Pinole, Solano Landscape Materials in Fairfield and Jepson Prairie Organics near Vacaville (quantities of 5 cubic yards or more). Prices vary from blend to blend. For more information, go to www.jepsonprairieorganics.com.
Source: "How to Grow More Vegetables" by John Jeavons, Woods End Laboratories.