## Recycling \_Update\_

# RECYCLING AND COMPOSTING: TURNING RESTRICTIONS INTO OPPORTUNITIES

By Helen M. Stone

ecycling and composting are viable options for every phase of the green industry. They can represent an opportunity for growth if you let new restrictions work for you instead of against you.

There's a good chance you are working in an area that already requires at least some reduction in greenwaste generated by your

operations. If there are no limitations, you've probably noticed that your tipping fees are increasing. Even if you live in one of the few areas that still has no restrictions, it's safe to say that there are regulations coming down the road. The time to begin or accelerate your recycling efforts is now.

Businessmen are often drawn to the landscape profession because of the opportunity for independence and entrepreneurship. Perhaps this is the reason why many took the first step toward recycling and composting long before it became a governmental mandate.

### Small Firm, Big Ideas

A small company often has an advantage because its size allows the flexibility to react to changes swiftly. "Although we provide a whole range of landscape maintenance services to many different types of clients, our niche is small residentials," says Carrie Blazek, vice president of Bayberry Landscape in Silver Spring, MD. Blazek and her partner employ anywhere from one to five workers, depending on the season.



Mulching mowers (above) eliminate the need for bagging and disposing of grass clippings. Photo courtesy: BLT Landscape

Chippers (left) are available in a wide range of sizes and styles. Photo courtesy: Bandit Industries

"We've reduced our greenwaste in many ways," Blazek explains. "We grasscycle, we build compost bins in our clients' backyards and we work with city recycling programs."

Bayberry Landscape's fleet of equipment includes both 26- and 36-inch mulching mowers. "We try to use them on as many accounts as possible," she says. "They do a good job. The only time we have a problem is in situations where it rains for several days in a row and we have long, wet grass. Then they tend to bog down."

Blazek says that Montgomery County has embraced green waste reduction with enthusiasm. "It has a center, where you can take clean yard waste, that costs less than half than the dump's fees," she notes. Homeowners are encouraged to put lawn clippings in separate containers when trash is picked up. "We provide some of our clients with trash cans for their lawn clippings," Blazek says. "We stencil our company's name on them."

### **Award-Winning Compost**

Garden Gate Landscaping, also in Silver Spring, MD, has won two awards for its recycling efforts. The design/build firm has its own nursery and a staff that numbers between 30 and 40. "We started recycling our soil back in 1989," says John Cimabue, a planting supervisor who oversees the recycling effort for the company. "We put sod and any soil we bring back from a job in a separate pile, and once a year we run it through a huge soil shredder and end up with topsoil that we reuse on our jobs. Grass clippings, leaves, spent annuals and tender prunings that are less than 1/2 inch in diameter are composted."

The materials are simply piled up, moistened and turned with a front-end loader. Urea is added to speed up the decomposition process. "It takes about a year," Cimabue notes. "We have several piles going, and it's an ongoing process. In the end, we have a great soil amendment. We never have to buy topsoil anymore."

Cimabue estimates that the company has cut its disposal fees by one-third. "We used to spend about \$30,000 on dump fees, we've cut that figure to about \$10,000," he notes. As an addi-

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tional savings, about 300 to 400 cubic yards of topsoil are generated a year. The composting operation takes about three hours per week, while the topsoil recycling program takes about 120 hours per year.

### Filling A Niche

In Decatur, IL, Romer Brothers Tree Service began its recycling operations about three years ago. "Our first incentive was rising landfill costs," says Mike Romer. After researching ways to decrease costs, Romer discovered that there were no local companies that offered recycling services. They decided to take the plunge and purchase a tub grinder and front-end loader.

"We run all of our tree waste through the tub grinder, and it produces a nice, fine chip," says Romer. "It makes a great mulch." The material is sold to homeowners. The company delivers truckloads of mulch county-wide, and never has trouble making a sale. Romer estimates that they have sold between 12,000 and 15,000 cubic yards of mulch.

In addition to processing its own tree waste, the company also processes material for the local university, nurseries, schools, park districts and townships. Their portable tub grinder can be easily moved to any site. Townships often will accumulate green waste, call the company out to process it, and then allow residents to pick up truckloads for their gardens free of charge.

Romer estimates that if the company had to use the county dump, its tipping fees would now run about \$20,000. Although the initial investment was sizable, he says the move was a good one. "We get more and more requests for the service all the time," he notes. "In fact, we're planning to purchase another, larger tub grinder."

### Recycling City Trees

"If we had to take our greenwaste to a landfill today, we'd probably be spending about \$300,000 a year," says Mike Ganues, forestry supervisor with the city of Toledo, OH. The city has more than 100,000 street trees and half a million trees in city parks. Ganues says the forestry staff of more than 30 people trims about 6,000 trees and removes about 2,000 each year.

"We double-grind our wood. We have both a whole-tree chipper and what's called a waste recycler. It can chip logs up to 7 feet in diameter," Ganues notes. The chips are then processed once more through a standard tub grinder to produce a fine finished product. The chips are sold to landscape companies, nurseries and homeowners.

"We sell both retail and wholesale," Ganues says. "If you purchase five yards or more, we'll deliver it for \$10."

Toledo also has a firewood program. "We market the wood for about \$90 a cord for mixed hardwood and \$120 for oak," Ganues says. "Homeowners also can buy a permit for \$10 a year and come into the yard and cut their own wood." Proceeds from both the mulching and firewood operations are turned over to the Toledo Urban Forestry Council.

"The money is used for helping reforest the city," Ganues says. "It's used for street trees and nursery trees, as well as education programs. It's also used to fund special planting projects, such as highway beautification. The extra funds are like icing on the cake."

### Closing the Loop

The city of Laguna Beach, CA, has reached an enviable goal. With the help of Integrated Urban Forestry, a consulting firm, the city has reduced its green waste to zero.

"We've developed what we call the Green waste Reduction Implementation Plan, or GRIPTM," says Tom Larson, president of the firm. The program was developed to follow several steps to implement a "closed loop," where the need to dispose of any green waste in a landfill is completely eliminated.

First of all, greenwaste is reduced up to 30 percent through source reduction. "This is accomplished through landscape management and design techniques," Larson explains.

A sophisticated composting program produces soil amendments, potting soil and mulch. "We process the materials through a tub grinder, and then compost it," Larson says. "We never use the chips until they're composted and we have a horticultural-grade finished product."

The city has its own nursery, where it uses the composted material to grow plants and "soil-less" sod for municipal landscape projects. Larger wood is either split for firewood or milled into quality lumber. Many urban trees are considered "exotic" species, and woodworkers gladly pay the price for the unusual hardwoods.

Like the city of Toledo, cost savings in dump fees are estimated at about \$300,000. Additional city savings include the "free" compost and topsoil, as well as water conservation and healthier plants due to the top-quality amendments and mulches.

If you're ready to start recycling, the first step is to check for any local ordinances. Some communities require permits for even the smallest composting operation. Investigate whether or not your community has taken any steps to initiate a composting and/or recycling program, and get involved. Even if there are no existing programs, start your own. You will be ahead of the game when the inevitable regulations are initiated.

"If you come up with a new idea, see how you can phase it in," Ganues suggests. "If you never try, you'll never know how it will work."

### TOOLING UP FOR RECYCLING: AN EQUIPMENT PRIMER

By Daniel Ingham

he tools available to turn yard trimmings into profits range in size and price from walk-behind mulching mowers costing a few hundred dollars to massive diesel powered tub-grinders costing \$250,000 or more.

### **Mulching Mowers**

The benefits of grasscycling, to the environment and the pocket books of both contractor and client are numerous. To do it right, though, requires more than just taping a piece of cardboard over the discharge opening of your mower.

For starters, you may just want to get a mulching kit for your current mower. Most manufacturers make kits specially designed for their line of mowers, which consist of gates to block off discharge chutes and mulching blades designed to operate with a standard deck configuration.

True mulching mowers, though, are designed to cut and recut the grass many times. Different deck and blade designs are necessary to mulch efficiently and provide quality results. There are also some mowing and maintenance techniques to be followed as well. It takes more than just a good machine, it takes practice.

More horsepower is required to create the additional lift needed to mulch clippings. Crews may experience some initial problems with grasscycling because they are failing to run the engine fast enough for complete mulching. Or, they may be trying to cover the area too quickly, not allowing time for com-

plete mulching. Operators must slow down. However, because there are no clippings to collect, overall time and effort is reduced.

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Tub grinders are used to produce a finelyshredded chip suitable for mulching or composting. Photo courtesy:Romer Brothers Tree Service



Kits are available from manufacturers to make conversion to mulching mowers a simple procedure. Photo courtesy: Excel