

## Composting at Weston Nurseries

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Weston Nurseries, Inc., Route 135, P.O. Box 186, Hopkinton, Massachusetts 01748 U.S.A.

Weston Nursery started composting leaf and yard waste in the 1960s. The owners believed in the importance and value of the finished product. In the 1960s the nursery purchased all of its leaves from a local municipality. The leaves were then trucked onsite and composted. The finished product was then used in the container mix and field production.

Weston Nursery started to accept leaves and yard waste on site in the mid 1990s when towns were mandated by state authorities to stop dumping leaves, grass clippings, etc. into landfills. During this period the nursery recognized a need to staff the leaf collection site. It was at this time that Weston Nurseries instituted a tipping fee to offset the cost of staffing.

Until recently the nursery accepted leaf and yard waste only. In 1997 the nursery recognized a demand to accept brush. Since its initiation, the compost site accepts approximately 1500 yards of brush annually. A tipping fee of \$7.50 is charged per yard.

### CUSTOMER BASE

The compost facility is open to all landscapers and area residents. The commercial accounts (landscapers, municipalities, etc.) are all charged tipping fees. Local area residents can use the facility free of charge.

### TIPPING FEES

Table 1 shows yardage and income for 1998.

- Brush - \$7.50 per yard
- Leaves and yard waste - \$4.50 per yard

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**Table 1.** Yardage and Income for 1998.

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Brush 1500 yards @ \$7.50 per yard	\$11,250
Leaf and yard waste 6000 yards @ \$4.50 per yard	\$27,000
Total	\$38,250

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### COMPOST MANAGEMENT

The leaf and yard waste material, is put into windrows. The size of the windrows varies, but in general they are around 150 to 200 ft long and about 9 to 10 ft high. The material is turned periodically until the composting process is completed. This generally takes up to a year to complete. When the composting process is completed the finished product is screened and utilized by the nursery in several ways:

- Container mix
- Field preparation
- Bulk sales

The brush is pushed up into large piles. When the piles reach a certain size we outsource a tub grinder to reduce the piles. The tub grinder turns the brush into a coarse wood chip product, which then needs to be composted before it is ready for use.

## COMPOST USED AT WESTON NURSERIES

### Container Soil Mixes.

- Shrub mix: bark, compost, and sand (3 : 1 : 1, by volume)
- Ericaceous mix: bark, compost, and stone chips (4 : 1 : 1, by volume).

**Field Operations.** Compost is applied at a rate of 135 yards per acre. This is equivalent to a depth of 1 inch.

### Bulk Sales.

- Wholesale customers.
- Retail customers.

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## Six-row Perennial Planter

### Paul Zelenka Jr.

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In 1998 Zelenka Nursery Inc. met with Holland Transplanter of Holland, Michigan, to design a mechanical means of planting bare-root perennial divisions. Up to this point we had only had limited success with our transplanter. Holland Transplanter and the Zelenka staff met several times and through trial and error came up with a 6-row planter which met our needs.

The planter was needed to plant hosta, daylilies, grasses, peony, and astilbe but still be flexible enough to plant *Taxus* rooted cuttings, *Buxus* cells, and even seedlings if required. This flexibility was a must after speaking with many growers who had perennial planters gathering dust. Also the bed width needed to fit our land use, harvest equipment, pruning riggs, and spray equipment. The biggest obstacles were: a pocket which could grip a small or nonexistent stem and the irregular shape of many root systems. A pocket was designed with a rubber yoke to hold a division below the soil level. Also two metal fingers supported the roots and guided them into the soil. The irregular root shape was accommodated by a wider and deeper shoe.

Other amenities were also added: larger bins and a shelf to hold reserve plants, hydraulic wheels to adjust for uneven beds and to aid in transporting, bench seats to accommodate taller workers, two heavy duty counters, and soil guides to ensure even soil packing.

After almost a year of talking and planning we took delivery in March 1999. After working out a few bugs this machine increased our planting rate in excess of 125% over hand planting of perennials. It has also increased our units per acre from 35,000 to 50,000 units per acre. It has allowed us to mechanically plant 95% of our bare-root divisions. About 5% are still hand planted due to severely irregular root shapes. *Taxus*, *Buxus*, and seedlings planted without a hitch.