

# BIOCYCLE

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## RECYCLED PRODUCTS

**How manufacturers  
use recycled feedstocks,  
open up new markets,  
expand business  
and create jobs**

# COMPOST MARKET PROGRAMS AT 60 FACILITIES

**A**S COMPOSTING programs continue to expand, more attention is being given to product quality, utilization research and market development. Composting projects which have ignored taking the steps to build markets or which produce inferior quality material have found it difficult to remain operational and gain public support. For this reason, a study was undertaken to evaluate experiences at 60 facilities, including most of the medium to large biosolids and MSW composting projects, plus specific leaf and yard debris sites. Twenty-seven percent (16) are privately owned; the remainder are publicly owned.

Compost can be distributed through many channels. It can be marketed directly to homeowners, to green industry professionals, or to product blenders. It can also be marketed through a series of distributors or a single broker who may sell the product on a retail or wholesale basis. Most compost

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*A study of projects composting biosolids, MSW and yard trimmings yields data on distribution methods, sales and customers.*

*Ronald Alexander*



producers interviewed, who are operating a marketing program, are marketing their product in bulk form and primarily to professional customers. Eighty percent of the biosolids composting plants, and 100 percent of the MSW composting facilities, are operating their own marketing or product distribution programs. Thirty percent of the facilities producing marketable product were selling it in both bulk and bagged form. None of the facilities were marketing their product in bagged form only.

Several large, nationally known private firms market most of their compost products in bagged form to the retail market. Typically, the feedstock of these products are leaf and yard debris or agricultural residues. None of the mixed solid waste composting facilities were aggressively marketing their compost on a retail basis. Typically, products which are retailed (to homeowners) should be of the highest quality, keeping in mind that misapplication is more common by non-professional users.

Approximately one-third of the facilities interviewed were not currently marketing their compost products, but instead were distributing them at no cost, using them on municipal projects, paying to have them land applied, or using them as landfill cover (see Table 1). Typically, these products were produced by start-up operations which had not yet developed a marketing program; produced by facilities having difficulty marketing their entire volume of production; or programs preferring to utilize the product rather than develop a marketing program. Many of the facilities also ran small give-away programs, primarily for homeowners local to the composting facility. All of the leaf and yard debris composting facilities and almost 80 percent of the biosolids composting facilities were marketing their compost products, while only approximately 25 percent of the MSW composting facilities were doing so. Product quality (i.e. inerts) and regulatory constraints were cited as a

main deterrent to marketing the MSW products. Several biosolids and MSW composting facilities were operating both product distribution and marketing programs concurrently.

**IN-HOUSE OR BROKERS**

The majority of the marketing and distribution programs are being operated by the compost producers themselves (in-house). Approximately 30 percent of the biosolids composting facilities are marketing their product through brokers or are having brokers assist them, while they simultaneously operate their own distribution programs. Often, larger publicly owned biosolids composting programs have utilized product brokers rather than develop their own in-house programs. However, recently, several of these programs have assumed the responsibility of operating their own in-house marketing programs. The reasons for this change of strategy include improving the competitiveness of their product, dissatisfaction with broker results, and desire to improve the overall operations and management of their composting facility.

It is obvious that the success of many of the programs has depended on their ability to produce high quality products. Compost producers must see themselves as product manufacturers and not waste managers. Users of high quality compost products require a consistent material, and for that reason, it was surprising that only 16 percent of the facilities currently operate qual-

utilization research on their products, publish utilization related literature, and advertise their product as necessary. However, less than 50 percent of the compost producers interviewed were publishing utilization literature for their products, and just 40 percent advertised their product to the industry in which they were to be marketed. Obviously, advertising may not be necessary in all cases and is dependent upon the quantity of compost being produced and other competitive factors. Many of these facilities stated that, once established, their compost marketing programs required little, if any ongoing advertising and therefore discontinued those efforts. Only 40 percent of the compost producers

Quality control programs are only in place at 16 percent of the facilities studied.



**Table 1. Product Marketing/Distribution Strategies**

	Marketing			Product distribution	
	Bulk	Bags	Both	Giveaway/Self Use	Other
Leaf/yard	5	0	3	0	0
MSW	4	0	0	7	6
Biosolids	20	0	9	6	5

Effective marketing and promotion methods include billboard advertising (top left, facing page); a demonstration garden located at compost pick up area (bottom left, facing page); and demonstration of composting methods alongside piles of mulch and blends in a garden center (above).

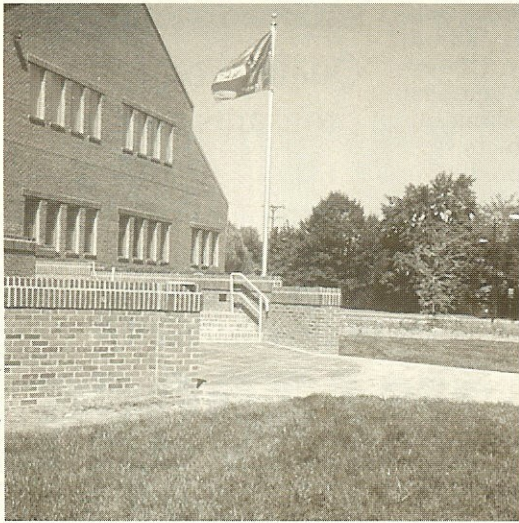
**Table 2. Compost Market Popularity**

Leaf/Yard Debris	MSW	Biosolids
1. Landscapers	1. Farmers	1. Landscapers
2. Garden centers	2. Landscapers	2. Topsoil Dealers
3. Topsoil dealers/homeowners	3. Landfills	3. Garden Center, Nurseries
	4. Local Governments, Nurseries	

\* Market popularity is based on the quantity of customers, not the quantity of compost marketed to those customers/markets

ity control programs. At this point, most of the ongoing testing on compost quality deals with safety related issues and not characteristics related to application or utilization. It is also important for programs to market their products using the same techniques utilized by other horticultural product manufacturers. Aside from assuring quality, manufacturers typically perform

had performed any research on their compost, and many performed only research related to the product's safety. Several existing programs could have improved their success by employing some of these common marketing tools, as well as by better training their program operators in the areas of compost utilization, production and marketing. Only a small number of programs,



**Programs marketing compost products earn between \$.50 and \$20 per cy for material picked up at their facility.**

**Specific compost blends for nursery, golf course and landscape applications - such as turf establishment - are marketed in various areas of the country.**

## BLEND TRENDS

**H**IGH quality compost products are versatile in their application and function. This is one reason compost is so popular. However, future market growth may rely on its use as a component to other *blended* products. The use of composted products as additives to blended products is not a new idea and, indeed, huge markets have already been developed for their use in this application. Its most popular current application is probably as an additive to topsoil blends, typically used to improve physical characteristics and increase organic matter content. The inclusion rate for compost in soil blends is based upon the characteristics of both the soil and the compost, the blends' intended use, and economic factors. Typically, inclusion rates range from 10 percent to as high as 50 percent. The use of compost in soil blends will undoubtedly expand as sources for high quality topsoil diminish. Various grades of compost may be used in this application, and its use will actually increase the value of the resultant topsoil product. The wholesale value of blended, or manufactured topsoils, has been identified at \$10 to \$25 per cubic yard.

The use of compost in industry specific blends has also been demonstrated, and holds great potential. Specific compost blends for nursery, golf course, and landscape applications have been marketed in various areas of the country. These mixes would be used in very specific applications, and the components of these mixes based on those applications. Typically, these specialized blends have very predictable and uniform characteris-

tics, contain other more expensive ingredients, and therefore possess somewhat high values.

For example, blends produced for the nursery industry, which usually contain peat or composted bark products and are used as growing media for greenhouse and container crops, can be priced from \$20 to \$40 per cubic yard. Golf course mixes, which contain high percentages of sand, can be priced from \$15 to \$35 per ton. Compost used on golf courses, and especially nursery mixes, must be uniform, have predictable characteristics, and possess properties which meet the requirements of that specific market. The final blended products which are to be marketed must also possess these qualities. Blends for special landscape applications, such as raised planters and rooftop gardens, may also be produced and marketed, as may blends ideal for specific crops or environmental conditions. Even the addition of nutrients, and biological control agents to compost products is feasible and may allow entry into new markets. The ability to expand into these value added, niche markets will be based heavily upon the ability to produce technically and economically acceptable products.

Tremendous opportunity exists for the expansion of compost markets, as well as the improvement of product revenues, by manufacturing blended products. However, developing new products and obtaining acceptance among customers will hold its own set of unique challenges, depending on the market to be accessed.

typically medium to large in size, actually employ individuals specifically for the purpose of marketing their product. It should be noted that as many of the compost marketing programs progressed over time, staffing requirements and program costs decreased. Although improvement to many of the marketing programs was possible, overall, most of the programs offering marketable products were achieving a good degree of success.

The programs avidly marketing their compost products were obtaining between \$.50 and \$20 per cubic yard for material picked up at their facility. The compost value was highly dependent upon product quality and type of customer. For instance, product brokers and large users purchased products for a considerably lower price than did smaller professional customers and homeowners. The value (sales price) of leaf and yard debris, and biosolids compost were comparable, while MSW compost value was considerably lower. Overall, program operators indicated that landscapers were their biggest customer (see Table 2), and their product's most popular use was as a soil amendment. Leaf and yard debris compost is being actively marketed through retail outlets, as is biosolids compost, but to a lesser degree. Biosolids compost was found to be utilized in the most varied applications. Much of this can be attributed to the fact that biosolids compost has been marketed for the longest period of time, compared to other nonagricultural waste derived composts, and because extensive research has been performed on its utilization in many applications and under various conditions.

Developing a successful program, and obtaining a market share, does not occur overnight. However, its development can be improved with the assistance of experienced individuals, and by performing market research. The research must be insightful, practical and completed by individuals possessing experience in this area. Market development activities must begin before product is actually made available. The greater the quantity of product, the earlier the market development program should start, and the greater the resources which should be allocated for its development. Providing training for inexperienced marketing staff on utilization of compost products, market trends, and user needs can help to improve staff and program effectiveness. It is obvious that all compost products are not alike, and neither are all end users. The characteristics of a compost product help to determine what it can best be used for, and in which markets it can most easily be sold. When marketing compost, it is essential to concentrate sales efforts on markets which best suit the specific characteristics of the compost. ■

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