

# SPECIAL NEWS & VIEWS REPORT: Using recycled plastic in the garden

January 2001

## Recycled plastics a blooming hit with Canadian gardeners

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There's no doubt that plastics recycling is big business. The number of companies in the field has more than tripled in the last ten years. Over the same time, the plastics industry alone has invested some \$1 billion in recycling initiatives across North America. But recycling is just one component of an integrated and sustainable waste management strategy. For plastics recycling to make continued economic — and environmental — sense, there have to be stable, dependable markets for the resins collected by community and industrial recycling programs.

The strong and growing demand for lawn and garden products is helping close the recycling gap between supply and demand. Garden centres are stocking, in greater and greater numbers, well designed and affordable products made of recycled plastics. From stylish, maintenance-free plastic furniture ... to hard-wearing plastic decking and fencing ... to attractive, lightweight plastic pots and planters ... dozens of recycled plastic products are attracting the attention of Canadian gardeners.

### Gardeners are a huge market

Gardening is the #1 outdoor hobby in Canada. Hard numbers are hard to come by, but it's estimated that gardening is a \$7 billion industry in this country, with about half of that total spent in Ontario. And it's proving to be no passing fad. According to Statistics Canada, spending on garden plants and lawn care services and outdoor

furniture and all the assorted paraphernalia has been growing at rate of ten percent a year for each of the last four years, with no softening in sight.

The production of ornamental plants in Ontario now tops the agribusiness rankings, with a higher farm gate value than any other crop. Flowers and shrubs are now worth more than wheat. More than corn. More than any of the fruits or vegetables our farmers produce.

"We call it the ornamental horticulture industry," says Tony DiGiovanni, executive director of Landscape Ontario, "and it's very big and very diverse." The trade association represents 1,600 of the province's growers, greenhouses, landscape architects and contractors, garden centres, lawn care companies, and irrigation firms. "Across Canada, there are more than 15,000 horticulture companies in the business, mostly small, family-based operations," says DiGiovanni with evident pride, "and they employ some 150,000 Canadians."

Demographics have a lot to do with the phenomenal interest in gardening. "As people get older, they tend to put aside their tennis racket and pick up a trowel," explains DiGiovanni. In addition, the economy continues to boom. As we pay down our mortgages, there's more disposable income left over to spend in the garden centre.

### You have to be competitive

It seems like there's a new garden centre opening on every corner. In the last couple



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## Recycled plastic's a blooming hit with Canadian gardeners

*From A to Z, there are hundreds of practical, affordable and attractive recycled plastic products that would look just about perfect in your garden.*

**A** is for aquatic gardens  
**B** is for bird feeders  
**C** is for containers  
**D** is for decking  
**E** is for edging  
**F** is for fencing  
**G** is for gazebos  
**H** is for hanging baskets  
**I** is for irrigation systems  
**J** is for jack-o-lanterns  
**K** is for kitchen composters  
**L** is for plastic lumber  
**M** is for Muskoka chairs  
**N** is for nursery trays  
**O** is for outdoor furniture  
**P** is for planters & posts  
**Q** is for quality control  
**R** is for rain barrels  
**S** is for plastic sheeting  
**T** is for trellises  
**U** is for umbrellas  
**V** is for vegetable stakes  
**W** is for window boxes  
**X** is for xerescaping mulches  
**Y** is for yard waste bags  
**Z** is for pots of zinnias

of years, most of the large retail chains — Wal-Mart and Costco, Revy and Home Depot, Canadian Tire, Loblaws and so many more — have jumped into the market.

“The lawn and garden sector is a big part of our business ... and it’s growing bigger every year,” says Susan Ormond, a product buyer for Revy Home Centers. From plastic lawn edgers to landscape fabrics, from plastic pots and planters to recycling bins, “we are really pushing this stuff right across the country,” beams Ormond.

“There are some regional preferences, but sales are strong in all of our stores.” However, you can’t just unveil a new garden

product, recycled or not, and expect to succeed. “As a buyer, I’m being shown more recycled stuff all the time,” Ormond cautions, “but being green isn’t enough. You have to be properly positioned to break into this market.” Consumers like to say they are environmentally conscious, but the price still has to be right. “Some green products have been more expensive, and we’ve had some otherwise good product lines flop,” she warns. “But if a recycled product is competitive in terms of both price and quality, then it has a real edge with our cus-

tomers.” Recycled plastic products are proving to be affordable alternatives to the traditional items on the shelves of your local garden centre.

### Designing for success

To remain successful, you also have to continually review and improve your product lines. Barry Creighton, the chief buyer

for Revy’s lawn and garden products warns that “plastic pots and planters may slowly lose market share to attractive — and cheaper — terra cotta and glazed ceramic items imported from the Orient.” Creighton agrees that price is an

important factor, but finish and design also affect marketability.

To reclaim the buyer’s attention, manufacturers have to offer innovative, attractive alternatives. For example, a terra cotta look-a-like pot made of recycled plastic is currently doing very well in stores. It has the warmth and colour of clay, but it’s ultra-light, a lot tougher and will last years longer. This is the kind of creative thinking that is helping to secure recycled plastics a bigger share of the dynamic lawn and garden market.



*Straight from the recycling bin to your garden. The San Francisco Flower and Garden Show featured a stunning garden created out of recycled plastic products.*

Plastic wood:

## Decking and lawn furniture

### Plastic's a winner, naturally

Glenn Harrington, a landscape designer with Harrington & Hoyle Ltd. (Markham, Ontario), says the option of using plastic wood comes up every time he works on a boardwalk project.

"Recycled plastic lumber works very well," says Harrington. "It reacts like wood. It sounds right when you walk on it." And best of all, plastic lumber will stand up to years of heavy use without warping, cracking or splintering. It's also very cost effective. While plastic lumber is competitive when you look at the capital costs, the real savings come over the life of the project. The long-term maintenance expenses are almost zero.

"Plastic lumber will last longer than the people who installed it," says Harrington. "If you approve a landscaping project that incorporates recycled plastic, you'll be retired long before it's time to rebuild."

### Canadian Recycled Plastic Products

Canadian Recycled Plastic (CRP) Products, located in Stratford, Ontario, manufactures the popular "Generations" line of outdoor lawn furniture from 100 percent recycled plastic, almost all of it out of post-consumer recycling programs. "If I can find a good source of plastic waste, I will use it," says co-owner Jamie Bailey. "This is a strong growth field and it can be hard to find enough recycled resin to keep up with the demand."

CRP's product catalogue includes traditional Muskoka-style chairs and rockers, with matching footstools and side tables, as well as stylish arm chairs and benches,

bar stools and chaise lounges, planters, trellises, park and garden benches, picnic tables, trash containers and recycling bins. It's hard to tell by looking, but they are all made of recycled plastic.

"We generally use a blend of 45 percent polyethylene, 45 percent polystyrene and 10 percent other resins,"

says Bailey. There's no stain required; CRP's furniture and other recycled plastic products are available in attractive shades of brown, green or gray. And because it is impervious to water and cold, the furniture can be left outside on the damp ground or in the snow all year round. The company also sells plastic lumber and landscaping ties, and installs custom fencing, playgrounds, decks, docks and walks. All made of recycled plastic, and all guaranteed to be durable and maintenance-free for generations.

"The lawn and garden field is a huge market," says Bailey. "If you have a new product, you have to educate the gardening public." When CRP started up, the staff travelled to more than 30 landscaping and home shows across Canada and the U.S. every year. And they took work and made sales wherever they could. "Recycled plastic products are slowly becoming a household word," says Bailey. Today, some 90 percent of CRP's business is done in Canada.

Recycled plastic products and services are marketed through the company's website, as well as wholesalers and smaller, unique retailers that cater to the discerning gardener. "About 60 percent of our business is with the household consumer," says Bailey, "but we also sell a lot of benches, bins and other products to municipalities, schools, golf courses, churches and other institutions."



*This beautiful Muskoka chair was made from 240 recycled plastic milk jugs. Versatile recycled plastic furniture never needs painting or staining.*

*Once summer rolls around, it's time to put your feet up and relax a little. Settle back in your recycled plastic hammock, gently swinging under a big garden umbrella, also made from recycled plastic. And while you listen to the song birds warbling in your recycled plastic feeder, reach over to that stylish recycled plastic sidetable for a colourful plastic tumbler full of, well, anything you want. It's your fantasy.*

*Don't worry; you aren't dreaming. Recycled plastic garden furniture and accessories are the real thing. Light, durable and easy to keep clean, you can leave them outside, winter and summer, in any kind of weather. And they'll keep looking good year after year, after year, after year, after year ...*

Plastic lumber:

## Outdoor garden furniture

*Do you look forward to spending those sunny summer days relaxing on your deck with family and friends? Plastic wood will give you more time to enjoy your backyard, and take less time to work in it.*

*However, if you prefer the life of the do-it-yourselfer, you'll enjoy working with plastic lumber. It cuts just like wood, and can be sawn, drilled, sanded, mitered or routed with your standard power tools. Unlike some materials, your finished project won't begin to rot, crack, flake, stain, chip or blister away the minute you put your tools down. And the best news of all? No splinters!*

### Canadian Plastic Lumber

A number of innovative Canadian companies have built solid reputations in the recycled plastic products field. For almost nine years, Canadian Plastic Lumber (CPL)

has been producing a line of plastic wood from a 100-percent commingled blend of post-industrial and post-consumer recycled plastics.

This is a flexible, long-wearing, durable material that stands up well to whatever the Canadian climate can throw at it, says CPL spokesman Andy Salmers. "It will grow or shrink a little with changing temperatures, but your contractor or supplier can tell you how to make the proper allowances."

Plastic lumber is less slippery when wet, and so is perfect for docks and open-air patios. It will never need stain because the colour is molded in. You will never need sealants, because plastic is impervious to water. You will never need to spray for ants, termites or other pests. And when it's cut, you won't have to treat the exposed ends.

Available through distributors or factory direct from their plant in Lindsay, Ontario, the company's plastic lumber is priced about the same as Grade A cedar. "Over the long haul, it's three times cheaper," says Salmers, "because it will last three times longer."

### Cascades Re-Plast

Cascades Re-Plast, Inc. also uses 100 percent post-industrial and post-consumer plastics to produce a premium line of recycled plastic lumber and outdoor garden

furniture. "We make a quality-oriented plastic wood," says Re-Plast's Fred MacLean from the company's offices in Montreal. "We started in 1989, and have continued to progress and improve our product lines ever since."



*They look like terra cotta, but light-weight pots made from recycled plastic won't chip or crack in cold weather.*

Re-Plast produces its plastic wood in all the nominal lumber sizes needed to create striking decks, balconies and patios. Unique shapes can also be custom molded. The catalogue includes both tongue-and-groove and finished boards, as well as stairway steps and the larger 6x6 landscaping timbers. The company claims its recycled plastic — about 80 percent recycled HDPE, with the remainder made up of smaller amounts of polypropylene, polystyrene, PET and other polymers — is federally approved and conforms to the construction standards for use in agri-food applications.

"Regardless of the application, our products are ultra-durable and totally maintenance-free," says MacLean. Plastic wood is non-porous and waterproof, resistant to wear, sunlight, oil, salt, and

various chemicals. Re-Plast produces it in a variety of colours — light gray, sandstone, brown, beige and redwood — and molded with a wood-grain textures. Re-Plast also offers a variety of modern and traditional park and garden benches, picnic tables, sand boxes, trash receptacles and a line of polygon, square and pedestal planters, again, all made of recycled plastic.

"We serve the North American market," says MacLean. "Our stuff is available in most of the big box stores in Quebec and Ontario. And we have made some strong inroads into the U.S. as well."

In the garden:

## Nursery trays and fencing

### Vacform Plastics

Vacform Plastics transforms 100 percent recycled polystyrene (PS) resins into millions of those thin-walled plastic containers, called "inserts" in the trade, used to hold fragile flower seedlings and individual vegetable plantings.

The company also manufactures a range of other products for the horticulture market, including nursery trays, flats and the shuttles a customer needs to carry a load of small pots to the cashier. Although all contain some recycled resin, the content depends on the product and its particular strength specifications.

The company's factory in Brantford, Ontario, is surrounded by a ready market of hundreds of small growers, but Vacform also sells to large greenhouses from Manitoba to New Brunswick and south into the States. With the increased interest in container growing, this is a growing market — especially in the U.S. — and recycled PS resins help make Vacform's products price competitive.

### Plastic Lumber Depot

Plastic Lumber Depot, a division of Waste Stream Management Inc., makes the Impact-Post — eight-foot lengths of 6x6 landscaping timbers — out of auto-shredder residue and post-consumer and industrial waste plastics. The auto residues impart the needed strength, while the plastics provide the necessary solidity to the

timbers. The Ajax, Ontario, company also produces its own brand of plastic lumber for decks and docks, and prefab kits to make your own recycled plastic benches, planters and picnic tables.

The Impact-Posts were designed for terracing and edging, retaining walls, garden boxes and planters, fence posts and any other non-structural application you can

dream up. The posts contain no creosote, arsenic or chemical preservatives that could leach into the environment. With an expected lifespan of 75 to 100 years, they won't warp, rot, twist or bend. And if for some reason you want to get rid of them, the posts are completely recyclable.



*Decks made of plastic lumber will offer decades of maintenance-free enjoyment at a fraction of the cost of wood.*

### Enhance Packaging Technologies

Enhance Packaging Technologies Inc., a Dupont Canada Company, makes a range of fencing products, including the Vexar(R) Yard Fence, all made from 97 percent recycled HDPE resins. The lightweight Vexar(R) fence, which has earned the federal government's Environmental Choice label, is easier to install and safer to handle than chainlink fencing, with no sharp ends or corners. It's also a rigid, sturdy fence that stands up well without sagging and requires fewer supports. Available in four attractive colours, Vexar(R) Yard Fence, is sold coast to coast through building supply dealers, lumber yards and selected fencing dealers.

*Plastic pots have revolutionized gardening. In the past, you could only plant new stock from the nursery during a few weeks in the spring or the fall in order to minimize the inevitable root shock. These days, plants grown in plastic containers can be transplanted into your garden virtually anytime during the growing season.*

*Container gardening is also a growing trend in tiny suburban backyards and on downtown rooftops. Small gardens are sprouting in light-weight plastic planters and greenhouses on patios and balconies. Apartment dwellers are enjoying home-grown tomatoes from their plastic window boxes, and condo owners are installing mini-ponds and fountains. Affordable, durable, practical plastic products mean anyone can be a blue-ribbon gardener.*

Plastic piping:

## Water gardening systems

*The Environment and Plastics Industry Council (EPIC) of Canada and the American Plastics Council have compiled extensive listings of practical and affordable gardening and landscape products made from recycled plastics. These are just part of the North American Recycled Plastic Products Directory, an on-line database which indexes hundreds of recycled plastic products from manufacturers in Canada and the United States. The Directory can be accessed, free-of-charge, through the EPIC website ([www.plastics.ca/epic](http://www.plastics.ca/epic)) from your home or office computer.*

### Soleno Inc.

Does melting snow pool at the bottom of your garden every spring? Do patches of dying grass spread across your lawn during the dog days of August? Whether your problem is too much water or too little, there's a recycled plastic product to help you maintain the right level of moisture. Soleno Inc. has just launched three new lines of corrugated HDPE drainage pipe made entirely from waste plastics reclaimed from community and industrial recycling programs at its plant in Hagersville, Ontario.

"People are really concerned about the environment," says Soleno's Marc Cusson, "and these new products are getting a lot of attention." Plastic piping is environmentally safe to aquatic life, lighter in weight than other kinds of pipe, easier to install and not subject to corrosion. And recycled piping conserves resources while providing a competitive edge in cost.

Soleno is producing its Eco-tubing in a range of sizes from 1 1/2 inches up to 12 inches, "ideal for a backyard garden drainage system," says Cusson. Products from the company's more substantial Eco-culvert and Eco-storm lines range from 4 inches up to 48 inches in diameter. All the necessary couplings, caps, ties, elbows, grates, catch basins and reservoirs are also made of recycled polyethylene.

In addition, the company produces a full range of plastic drain pipes and couplings, geo-textiles, septic tanks and accessories to the agricultural, municipal and construction markets. "We are the only ones in the recycled plastic piping business to qualify for the federal Environmental Choice label," says Cusson.

From municipalities to golf courses to nurseries to home gardens, "this is going to be a great market," Cusson smiles. Soleno's Eco-piping lines will be available through retailers and do-it-yourself stores across Canada, through the States and even into Mexico.

### Mini-Directory

This is only a small sampling of the Canadian companies making inroads into the lawn and garden market with recycled plastic products. Next time you visit the local nursery or garden centre, keep your eyes peeled for plastic.

#### Canadian Plastic Lumber

164 Needham Street,  
Lindsay, Ontario K9V 5R7  
705-878-5700

#### Canadian Recycled Plastic Products

508 Erie Street,  
Stratford, Ontario N5A 2N6  
519-271-1283

#### Cascades Re-Plast, Inc.

Sales Office  
772 Sherbrooke Ouest, suite 400,  
Montreal, Quebec H3A 1G1  
514-284-9857  
1-888-703-6515

#### Enhance Packaging Technologies Inc.

A Dupont Canada Company  
201 South Blair Street,  
Whitby, Ontario L1N 5S6  
1-800-263-2742

#### Plastic Lumber Depot

A division of Waste Stream Management Inc.  
172 Hunt Street, Unit #2,  
Ajax, Ontario L1S 1P5  
905-426-1755

#### Soleno Inc.

1160, Route 133, C.P. 147,  
Iberville, Quebec J2X 4J5  
1-800-363-1471

#### Vacform Plastics

27 Catharine Avenue,  
Brantford, Ontario N3T 1X5  
519-759-1900

# Practical tips for gardening with recycled plastics

- 1.** Plastic plant and tree stakes are as strong as wood, even more flexible, and hold up much better in damp conditions. Plastic twist ties can be used to attach delicate stems to a trellis without damaging the plant. And like your plastic stakes, they can be reused year after year.
- 2.** You can extend the growing season with a temporary plastic "greenhouse." Simply bend plastic piping over raised beds and cover with clear plastic film to safeguard delicate seedlings through the night. Remove these covers during the day to prevent your plants from shrivelling under the sun.
- 3.** Take advantage of rainy days by channeling rain water from the down spout of your house to a plastic rain barrel. Some models even come equipped with a spigot at the base so you can attach a soaker hose.
- 4.** Use recycled plastic edging products to create elegant curves and maintain clean lines in your garden beds and walkways.
- 5.** Facilitate deep root growth by driving recycled plastic piping deep into the ground near plants. Leave some of the piping exposed and fill it with water.
- 6.** Lightweight plastic pots mean you can set up a green refuge on the smallest balcony or patio. They are as warm and inviting as terra cotta, but won't chip in cold weather or break if dropped. And you won't risk a hernia every time you want to rearrange your garden.
- 7.** Accent your garden with hanging baskets and planter bags, fence boxes and decorative frescoes, all made from recycled plastic resins. There may even be room for a traditional garden gnome; the plastic variety can live in your garden all year round.
- 8.** Tree guards made of plastic protect young trees from gnawing rabbits and other pests. And a plastic squirrel guard may even keep those agile scavengers out of your bird feeder.
- 9.** Reuse small polystyrene peanuts by mixing them with potting soil for the larger pots in your container garden. They create more pore spaces so that water and air can reach the roots readily. The light plastic chips also make the big pots easier to shift around.
- 10.** You can create a mini-aquatic garden with a large plastic pot, some plastic tubing and a simple plastic pump. The more ambitious do-it-yourselfer can do the same thing on a larger scale with plastic sheeting, a shovel and a strong back.
- 11.** Save those big five-gallon plastic buckets and their lids to store fertilizers, plant food, lime and other compounds you need to keep dry.
- 10.** Cut the tops off clear two-litre PET soft drink bottles to create portable mini-greenhouses. Then invert them over the individual plants in your garden that might be sensitive to late spring frosts.

*Gardeners have a special feel for the natural cycles of growth and renewal. They know there's a time to plant, a time to prune and weed, and a time to put the garden to bed for another year. They understand how to use compost to coax out and nurture new life, how to conserve water and nutrients for when they will be needed most, and how to apply age old skills and modern science to making the most barren places green again. That's why gardeners appreciate, better than most of us, how recycled plastic products can make their gardens bloom.*

*Adapted, in part, from "Tips For a Greener Garden", prepared by award-winning garden designer Joyce Gagnon for The American Plastics Council, March 1999.*

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## **Contact List**

For further information on the use of recycled content material  
in plastics packaging, please feel free to contact:

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