

# BIODEGRADABILITY: THE GREAT MYTH

Most of us like to think we know something about what's biodegradable and what's not. Anybody worth his ecological salt knows which substances break down and which ones don't.

## WE READ LABELS, DON'T WE?

Well, a noted archaeologist who excavates landfills says much of what we believe about biodegradability is pure rubbish! Archaeologist William L. Rathje has literally uncovered some essential truths about what happens in landfills through his program called The Garbage Project at the University of Arizona.

The archaeologist first provides a break down on what's really in most municipal landfills, then goes on to explain why it doesn't break down. Despite the bad rap that plastics, disposable diapers, fast food packaging and cans get when people are "talkin' trash," Rathje says that paper is the real culprit in every landfill.

Not that those other items aren't contributing to the overall problem, it's just that **paper accounts for 40 to 50 percent of everything we throw away, both by weight and volume.** But that shouldn't be such a problem, if it's biodegradable, right?

Not really. Rathje reports that during an excavation in Phoenix, he found newspapers dating back to 1952 that were so clean and well preserved a person might read one over breakfast!

So why doesn't paper break down rapidly in landfills like we've been led to believe?

Laboratories can make newspapers biodegrade into gray slime in a few weeks or

months, if the newspapers are finely ground and placed in ideal conditions. But newspapers are not placed into the landfill already ground up and the conditions are far from ideal. Without sunlight, air and moisture, the decomposition process is virtually halted.

## AND WHAT ABOUT PLASTICS?

When Rathje exhumed, sorted and weighed some 16,000 pounds of garbage on a recent excavation, he found that plastics accounted for less than 5 percent of the landfill's contents by weight and less than 12 percent in volume.

Ironically enough, the fact that plastics don't biodegrade, which is most often cited as a defect, may actually be one of its great virtues. Just because plastic takes up a lot of room in our kitchen trash can, we think it takes up a lot of space in the landfill.

Not so, according to this noted landfill excavator. Rathje says anything plastic is squashed flat by the time it gets to the landfill by garbage truck compactors. And plastic, being inert, doesn't introduce toxic chemicals into the environment. The newly developed biodegradable plastics aren't all they're cracked up to be, because it takes up to 20 years for the plastic to break down into hundreds of miniature plastic chips, with the total volume of plastic remaining the same!

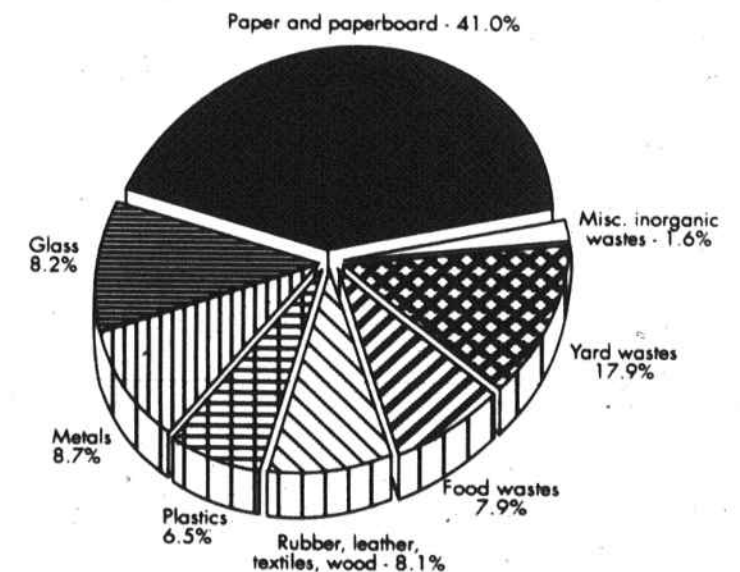
Food waste and yard debris do degrade, but at a very slow rate, by 25 to 50 percent over a period of 10 to 15 years. The remainder of the refuse in landfills seems to retain its original weight and volume and form. It is in effect, mummified.

So now that we've debunked a few widely accepted beliefs about biodegradability, what's a conscientious person to do?

## CUT DOWN ON THE AMOUNT OF GARBAGE GOING TO THE LANDFILL THAT IN REALITY WON'T BIODEGRADE AT ALL

We can be diligent about not putting unnecessary paper in the landfill. Make sure any and all paper that can be recycled gets recycled, whether it be newspaper, grocery sacks or phone books!! Likewise with plastics, (and don't forget aluminum and steel cans!). Instead of throwing food scraps in the trash, try composting for a change. The same applies for yard debris; it can be used for mulch.

Rathje contends that there's nothing new under the sun when it comes to civilizations dealing with garbage. We can either dump it, burn it, make into something new, or reduce the source of the solid waste. He says America can manage its garbage by improving on these four basic approaches.



## THE BOUNTY FROM OUR BINS: CURBSIDE TONNAGE UPDATE

RECYCLE TODAY is pleased to announce that Winston-Salem residents have saved more than 24 million pounds of recyclable material from going to the landfill!

Instead, it's been picked up through the City of Winston-Salem's curbside recycling program and taken to the BFI Recyclery. Thanks to you, we've got an impressive bounty to boast about. Here's a closer look:

**Let's Keep Those Bins Brimming, Folks!!**

Plastic  
1,250,850 lbs.

Aluminum  
622,980 lbs.

Glass  
6,364,880

Steel Cans  
318,380 lbs.

Newsprint  
15,722,000 lbs.

