

# Garbage Project studies landfill contents

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FAIRBANKS — Once I performed an inadvertent experiment on how quickly garbage decays in cold Alaska soils. It's a tale with outlines familiar to many northerners: building the cabin, shopping at case-lot sales, stashing cans besides the trail because they're too heavy to carry all at once, misplacing the cache, something happens.

Sometimes it's an early snow, or a clever bear. In my case it was an early rising cat Skinner, come to put in the driveway along the trail's approximate route. Somewhere under his new berm lay four two-pound cans of coffee. So much for case-lot sales.

The lost coffee came to mind recently because garbage has been very much in the headlines. Some Alaska stores are earning points with the environmentally conscious by returning to plain old-fashioned biodegradable brown paper bags for carrying groceries.

There's discussion of banning or taxing the seemingly immortal

disposable diaper. Landfills are filling up.

Wise folk are warning that if we don't shape up, we'll find ourselves living on a veritable plastic Alaska Range, true mountains of trash indigestible to the micro-organisms and decay processes that return natural materials to the soil.

At least one expert is bucking the trend. William L. Rathje, an archaeologist at the University of Arizona, has been involved with something called the Garbage Project since the early 1970s.

Many archaeologists are deeply into garbage, often disguised by clean-sounding technical terms like "kitchen midden," but usually they deal with far older material than Rathje and his students consider. As he reports in a recent article in the *Atlantic Monthly*, the Garbage Project looks at U.S. landfill contents and trash fresh from the can.

If it's a fair way to study earlier civilizations, it's a fair way to study current ones. Yet almost as a byproduct of the project, Rathje has

become knowledgeable on what fills up our modern mass middens. He says the conventional wisdom is wrong.

Plastic? It makes up about 5 percent of landfill contents by weight, 12 percent by volume. Foam, the favorite of fast-food packagers and a favorite target of those aiming for a trash-free society, makes up a third of 1 percent of landfill volume.

Out of eight tons of waste that the Garbage Project exhumed from seven landfills — in Arizona, California and Illinois — the workers found less than 16 pounds of fast-food packaging material. And less than 1 percent of the excavated trash, by weight, was disposable diapers.

The real culprit turned out to be paper. Rathje's studies have shown that 40 to 50 percent of everything we throw away, by weight and by volume, is paper. Though laboratory work with old newspapers can biodegrade yesterday's headlines into an amorphous gray slime by next month, laboratory conditions do not prevail in landfills.

One Garbage Project trophy is a perfectly readable 1952 newspaper dug up in 1989.

Which brings me back to the buried coffee. Twenty years after the bulldozer blade interred the cans, the roots of a falling spruce tree lifted them into the light again. All the cans had been damaged during burial; some were creased with track and blade marks and one had a stone imbedded in it. Rust had further pocked and holed the cans.

The coffee itself — that biodegradable natural product, already ground into small, decayable particles — looked fine. As an experiment, I tossed some into boiling water. It smelled like morning.

Yet I wasn't scientist enough to drink the stuff. It looked all right, and it smelled all right. But still. . . So cautiously, I threw it away. May it bring some joy to an archaeologist working in the old Fairbanks landfill in, say, 2090. It will probably still be there.