Why compost human waste?

Treating water takes fossil fuels
One third of a city's energy budget goes toward treating drinking water.

Conventional agriculture takes fossil fuels
Sustainable societies in China and Medieval Europe have used human manure to till land for thousands of years. Societies in Eastern North America have exhausted their soil phosphorous inn a matter of 300 years and are now being propped up by fertilizers derived from fossil fuels and produced by fossil fuels.

Humanure matches our food needs
Regions without manure management suffer from deadly illnesses caused by water contaminated by human waste. At the same time, the nutrient requirement of our crops is matched exactly by that provided by our wastes. Our problem can become the solution.
In a low-carbon future, Humanure composting could solve the need for cheap sewage treatment, while building soils, without the energy, money and emissions required for large sewage systems

Bylaws
It is not against the law in Halifax to build your own composting toilet. The only law pertaining to this practice states that a house must be built with a connection to sewage treatment as it exists or a septic tank or field. but nothing says you have to use it.

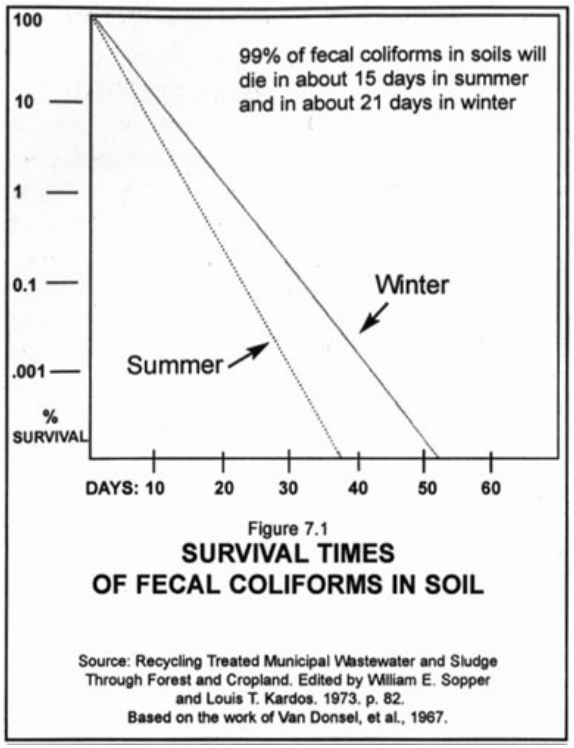


Figure 7.1
SURVIVAL TIMES OF FECAL COLIFORMS IN SOIL

Source: Recycling Treated Municipal Wastewater and Sludge Through Forest and Cropland. Edited by William E. Sopper and Louis T. Kardos. 1973. p. 82.
Based on the work of Van Donsel, et al., 1967.

The viruses, bacteria, protozoa, and worms that can be passed in human excrement all have limited survival times outside of the human body.

You can read more for free at the Humanure Handbook by Joseph Jenkins! (www.weblife.org/humanure)

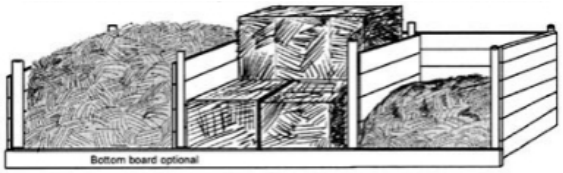
You can find this pamphlet and more on many subjects at www.halifaxearth.ca

Home Humanure

Build your own composting toilet

Building a pile is easy

Go in the bucket! Then, cover with a high-carbon substance (sawdust, straw, coffee chaff, cocoa hulls, wood chips, autumn leaves, shredded newspaper, or other). Use any and all toilet resources, excepting those that contain plastic. When the bucket is full, it goes to the pile.



The pile box is lined with straw. As buckets are added, straw covers the bucket material each time. Keep the top of the pile flat and add fresh buckets to the centre of the pile. As you build the pile, introduce large branches or straw to trap oxygen in your pile., a box 4' by 4' will contain a pile large enough to provide enough material and insulation. Make sure your pile rests for a year before use on food crops.

Fill your bin for a year. Then let it cure for a year before using. In this way with two bins you can have compost every year.

Safe temperatures

Compost becomes hot enough when it has access to enough oxygen. Aerobic composting (with oxygen) achieves hotter temperatures, killing harmful germs and weed seeds. Aerobic compost has a pleasant, earthy smell.

A lively pile is a clean pile

The destruction of human, animal, and plant pathogens in compost comes from:

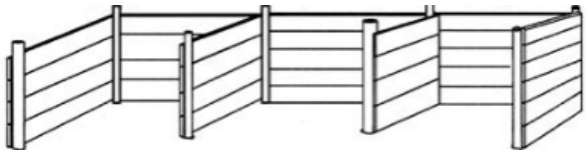
* Competition for food from other lifeforms

* Antibiotics made by compost life

* Compost organisms eat them

* Heat created by compost life

A long curing period (e.g., a year) adds a safety net for pathogen destruction.



Compost ingredients

Nitrogen
Sources include: Manure, urine, proteins, feathers, green material, legumes such as alfalfa

Carbon
Sources include: (untreated) sawdust, straw, hay, bark mulch, coffee chaff, pine shavings, corn husks, paper, cardboard, cocoa husks, Yesterday's News kitty litter (recycled paper pellets), peat moss (not renewable), stove pellets and coconut fibre

Water
Usually urine provides enough water. In a wet environment like Nova Scotia it may be necessary to cover your pile with a tarp or roof during heavy rains.

Oxygen
Oxygen keeps the pile hot for safe composting. Use bulky materials such as twigs, yard waste or wood chips to trap air between layers.