

# MOTHER EARTH NEWS

## What Are Composting Toilets?

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By Chris McClellan



*What are composting toilets? Are they really that much better for the environment? Are they gross?*

A composting toilet is a miniature ecosystem designed to recycle human excrement safely by containing it while microorganisms convert it to humus. Returning that humus to the soil is one important ecological

benefit. Another benefit of composting toilets is that they use little or no water. By comparison, a "normal" toilet adds up to 5 gallons of pure drinking water to an ounce or so of waste so it can be flushed into an expensive septic or sewer system, where it is treated. The American Water Works Association Research Foundation finds that over 30 percent of household water use is just for flushing toilets.

Because composting toilets keep human excrement out of the household wastewater, the remaining greywater from the kitchen, shower and washing machine can also be used to water lawns and trees (see Art Ludwig's book [Create an Oasis with Greywater](#)). Even if greywater recycling is impractical, a composting toilet can greatly prolong the life of your septic system and reduce pump-out and maintenance costs (usually \$200 to \$300 every other year) because most of the problematic solids are kept out of the system. Composting toilets also are used to reduce septic system flow-through in places where it creates problems, such as lake cabins and houses with older, low capacity systems, or places with bedrock, heavy clay soil or high water tables. For a more comprehensive look at septic and composting systems, see Lloyd Kahn's [Septic System Owner's Manual](#).

Commercially available composting toilets range in cost and capacity from the \$1,000 Nature's Head or \$1,500 Sun Mar toilet (small enough to be installed in an RV but only able to handle a single full time user) to \$10,000 Clivus Multrum units that can handle a large household. The Clivus Multrum-style composting toilets at the visitor center for Frank Lloyd Wright's famous Fallingwater house take care of 120,000 visitors per year, minimizing the impact of so many guests on the sensitive Bear Run watershed ecosystem.

A composting toilet can also be as simple as a 5-gallon receptacle, with fresh sawdust added after each use and emptied regularly into a specially prepared outdoor compost bin. This type of do-it-yourself system is detailed in Joe Jenkins' [Humanure Handbook](#).

The "humanure toilet" system will almost certainly be unknown to local permitting agencies, which often resist even code and NSF (National Sanitation Foundation) approved systems because of inexperience or assumptions based on experience with pit privies. Certainly composting toilets require more "hands-on" upkeep from owners, such as emptying of the clean, composted material every six months or so. If it is overloaded or not taken care of, a composting toilet can also draw flies or smell bad.

If designed and operated properly, composting toilets are clean, odor-free and will kill the pathogens in human excrement that spread disease while creating fertilizer and saving a lot of water.

For reports from readers who use this eco-friendly option, read the comments to [Would You Use a Composting Toilet?](#)

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*Photo by Jared C. Benedict*