

# The Joys of Living with a Composting Toilet

by Chris Melo, sailboat resident and nautical engineer  
Padanaram Harbor, Dartmouth, Mass.

**1. Simple installation.** There is no holding tank to fit, no hoses to run through large holes in bulkheads and decks, no valves and vented loops to mount, and no seawater intake to connect. Depending on the available dimensions, this can be a true drop in installation. The air duct deck connection requires some consideration and potentially a bit of fabrication, but can be made simple by the suggested addition of a mushroom-type desk vent.

**2. One less large fitting through hull.** More often than not, when the water comes pouring in and you don't want it to, it is through a fitting where you did want it to. The average small pleasure boat would take only a few minutes to sink with a failed inch and a half through hull fitting such as typically used as an MSD (marine sanitation device) overboard discharge.

**3. Simple visitor instructions.** Sit. Open trap door for #2, leave it closed for #1. Rise and close the lid and trap door if appropriate. Turn the crank handle if used for #2. Anyone who has tried to steer a landsman on a straight course through the operation of a typical marine head will well appreciate the end to the need for a head-use lesson, most likely to be required at a time when the user is least likely to remember it.

**4. No potential for operator error to result in a half day of the most unpleasant of boat chores.** See #3 for one of the many reasons why that which should not and will not pass through a typical marine head might end up trying to do so. Those who have experienced the need to hunt down such an obstruction will know that Murphy's law applies. Therefore the object will be lodged in the last joint disassembled. The chore is rendered more unpleasant by the knowledge that the reassembly of your typical MSD, even under the most careful exertions, will leave the system slightly leakier and more odiferous than it was before. Simply put, vapor-proof hose does not reconnect well and is too expensive to simply throw away every time.

**5. No potential for operator error to flood the boat.** In some standard MSD installations, the entire head is located below the waterline. With most toilets, this means that a flush valve left in the open position will allow the boat to slowly flood. Revisit advantage #3 with newfound appreciation. Revisit advantage #4 with newfound trepidation via the realization that this pitfall could cost much more than a bad half day.

**6. No head odor in the boat.** Installed as directed, the Nature's Head is a shipmate of the least odiferous kind. A typical saltwater-flush marine head will almost always have an odor. At best it will be that of stagnating saltwater. At worse, it will be much less pleasant. If you are trying to budget the capacity of a given holding tank, you will never have the luxury of flushing as thoroughly as you might wish.

**7. Extended range.** By separating liquid and solids, and eliminating the addition of flush water, the Nature's Head typically needs emptying less frequently than a normal MSD holding tank. Naturally, this is a function of use frequency and population density on your boat. I would, for example, advise a large family of eight on a three-week cruise to install three Nature's Heads. For reference purposes, one full-time liveaboard might need to empty the liquid tank once a week and the solid tank once per month. Any periods of disuse will greatly add to the number of uses between solid tank emptying.

**8. A true anywhere solution.** In some places, government grant money pays for holding tank pumpout boats and facilities. This makes a typical MSD relatively easy to use properly. In more places, this luxury is not an option, and pumpout stations either don't exist or cost money. Often, a cost equates to infrequent use. In a waste system, disuse generally results in inoperability. The Nature's Head allows anyone to manage their own waste legally without outside assistance.

**9. Opportunity to put waste to work.** Composted waste makes plants grow. Learn how and complete the cycle while reducing the burden on wastewater facilities in the books, *The Composting Toilet System Book* and *Liquid Gold: The Lore & Logic of Using Urine to Grow Plants* (both available from Ecovita). It's hardly a secret that these can pollute on a massive scale when overloaded.



Urban harbor specialist Steve Bliven empties finished compost from his composting toilet used on his Southern Cross sailboat.



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p.o. box 1330, concord, ma 01742 • [info@ecovita.net](mailto:info@ecovita.net)