

# The Care & Feeding of your Septic System...

**T**HERE ARE SOME THINGS that should never be discussed in polite society—and rarely if ever written about in a publication intended for mixed company—but sadly, we have no alternative. Because this is a topic that greatly concerns all of us in Tom Nevers, from both a health and economic point of view. It's that dark and mysterious place beneath our properties...our septic systems. And the more you know, the more you'll begin to think of those tiny organisms who live there as "friends of the family"—tiny pets, working tirelessly to keep your property both safe and valuable.

Depending on when and how it was built, your septic system does a great job of converting your household wastewater into water that's safe for return to the aquifer. And it will keep functioning perfectly, if you continue to treat it right. That means having your septic tank pumped out every 2 to 3 years, not overloading the system or poring destructive materials down the drain, and keeping an eye open for physical damage to your septic tank and drainfield.

Unless you have a very new house or have recently replaced your septic system, chances are your current system does not meet the latest "Title 5" code requirements. But that's OK, as long as your system keeps functioning properly. When you sell your house, a septic system inspection is absolutely required. Fail that inspection and you could be looking at a \$20,000 or more upgrade. Ditto, if your system fails while you still own your house. Thus the importance of routine maintenance.

Your septic system purifies your wastewater in three stages. Stage I takes place in the Septic Tank...a watertight container designed to let the solids settle out (forming sludge) and the oil and grease to float to the surface (as scum). Your Septic Tank is the banquet hall for your microbes, and they do like a leisurely dinner. As more wastewater is added to your

Septic Tank, the semi-treated wastewater...in between the bottom sludge layer and the upper scum layer...flows out through pipes to your Stage II Drainfield.

Problems with your Septic Tank can occur when wastewater comes in and goes out too quickly, reducing the time available for separation and microbe feasting. This happens if the space between the sludge layer and the scum layer grows too narrow, or if you overload the Tank's available wastewater capacity. Pumping out your Tank regularly removes both the sludge and scum layer buildup, restoring available capacity. Not dumping large or continuous quantities of water down your drain (e.g. running sequential washloads, not fixing leaky toilets, emptying hot tubs, etc.), gives your Septic Tank more time to work fully. Cracks in the Tank itself are a bigger problem, requiring expensive solutions. Cracks let contaminated water flow out and ground water flow in...overloading your Stage II Drainfield.

When wastewater exits your Septic Tank (Stage I), it flows into an array of perforated pipes called a Drainfield (Stage II). Here, other microbes go to work to further purify the wastewater before it percolates into the surrounding soil. Think of this as their underground picnic area. Just as with the Septic Tank, if too much wastewater comes in too fast, your microbes have to cut short their mealtime. And if sludge and scum are pushed along from your Septic Tank into your Drainfield, the pipes can clog up and stop functioning. The only fix then is probably to replace them. Also, avoid parking vehicles atop your Drainfield, and plant only grass or small ground cover above it. Bush and tree roots can clog your pipes, and excessive weight can crush them and compact the surrounding soil.

Stage III is the soil surrounding your Drainfield. Here too, microbes snack away at the remaining bacteria, viruses and nutrients in your wastewater...purifying it further as it percolates

down to the water table and into the aquifer. If the soil won't accept your flow of wastewater, or if your Drainfield clogs up and stops functioning, everything backs up...into your yard and into your house. Unless you have a microbe's appetite, you won't much enjoy this.

Now that you have your PhD in Septic System Science, you might ask..."So what should I do to keep my system functioning flawlessly?"

**The Do's:** Have your system checked out and pumped out every 2 to 3 years by a licensed pro. Use water efficiently to avoid overloading the system (one washload daily is better than several in succession). Repair leaky faucets and toilets. Plant only grass or small ground cover over your septic system. Alert your renters and guests that you have a septic system, and tell them how to treat it. (If they're city folk, write it down because they won't believe you!)

**The Don'ts:** Don't use your drain as a trash can. Don't put dental floss, feminine hygiene products, condoms, diapers, cotton swabs, cigarette butts, coffee grounds, cat litter, paper towels, latex paint, pesticides or other hazardous chemicals into your system. Don't use bleach in your wash loads. Don't use anti-bacterial cleaners. Don't pour fats or oils down your drains or toilets. Don't use caustic drain openers for clogged drains. Don't use septic tank additives, yeast, sugar, etc.—they're unnecessary and may be harmful. Don't drive or park over your drainfield.

What if you only use your septic system in the summer? The Nantucket Board of Health says..."No problem." Your tiny friends will still be there to welcome you back next season. No special start-up procedure is necessary. But even with just seasonal use, they recommend pumping out your septic tank every 2 to 3 years.

Bon Appetite! ❖