



Properly Landscaping Your Septic System is Critical

Besides knowing what not to put *in* a septic system, it is critical to know what not to put *above or around* it. Being short-sighted on this responsibility can cost thousands of dollars in repair or replacement of your system.

Landscaping with the septic system in mind offers many attractive options. When building a new home, your general contractor or a landscape specialist can suggest ways to minimize the visual presence of your drain field or mound while improving its function with a number of natural options. If you have an existing home, it is good to examine your septic system area making sure top soil, bushes and trees are properly positioned.

Placement of various plants on and near the mound must be done with care to ensure the septic system optimally functions. A system is enhanced by plants that remove moisture and nutrients from the soil while providing cover to prevent erosion.

Tree roots are a major problem for septic systems. The small sapling you plant today will eventually have an expanding network of roots. If too close, these roots may cause damage. Do not place trees **ON** the mound. They may be planted at the foot or on side slopes, but at a minimum of 20' from the edge of the mound. Tree varieties having roots that seek water

sources such as willow, elm, maple and poplar should be planted at least 50' from the mound. Shrubs should not be planted on top of the mound. They may also be planted at the foot or side slopes at least 20' away.

Several species of wildflowers and grasses are excellent choices for mound planting. They tend to do well in dry conditions (since you should not irrigate the area), and their shallow roots hold the top soil in place. Grasses also provide year-round cover.

The following plants grow well on dry soils and would be good choices for a mound septic system. Check your geographical area for suitability.

Wildflowers

- Prairie onion (*Allium stellatum*)
- Pussytoes (*Antennaria neglecta*)
- Butterflyweed (*Asclepias tuberosa*)
- Heath aster (*Aster ericoides*)
- Bigleaf aster (*Aster macrophyllus*)*
- Pennsylvania sedge (*Carex pennsylvanica*)*
- Prairie clover (*Dalea* spp.)
- Pale purple coneflower (*Echinacea angustifolia*)

Wildflowers (continued)

- Rattlesnake master (*Eryngium yuccifolium*)
- Wild geranium (*Geranium maculatum*)*
- Prairie smoke (*Geum triflorum*)
- Oxeye (*Helianthus helianthoides*)
- Rough blazing star (*Liatris aspera*)
- Wild bergamot (*Monarda fi stulosa*)
- Penstemon (*Penstemon* spp.)
- Pasqueflower (*Pulsatilla patens*)
- Violets (*Viola* spp.)*



Grasses

- Sideoats grama (*Bouteloua curtipendula*)
- Blue grama (*Bouteloua gracilis*)
- Little bluestem (*Schizachyrium scoparium*)
- Prairie dropseed (*Sporobolus heterolepis*)
- June grass (*Koeleria macrantha*)

**shade tolerant*

Low maintenance lawn grasses, including fine fescues, make dense cover and only need to be mowed a couple of times a year. It is best to mow them in October and late June to reduce weeds. Fescues are traditional lawn grasses that tolerate dry soils and shady sites. Fine-textured

fescues, such as creeping red, hard and sheep's fescues mixed in equal proportions and seeded at the rate of 3.5 pounds per 1000 square feet work well. Other options are common lawn grasses, such as common Kentucky bluegrass and perennial ryegrass. They can be planted on a mound requiring regular mowing. Mowing will increase evaporation from the mound and aid in rodent control. **Perennial flowers** can also be grown if mulching and planting close together so soil will not be exposed and erode.

Do not irrigate or fertilize on a mound. Use plants that can withstand dry conditions. Never plant edible plants or herbs on a drain field or mound. Using low maintenance plants reduces traffic on the mound.

It is important to not have any vehicle drive over your system. A truck delivering decorative stone or a tree for your landscaping will likely cause damage if going over your septic system. Even a car's weight is prohibitive. The best rule of thumb is to keep all vehicles off limits, except for standard or riding lawn mowers. Natural barriers provide attractive, living fencing to prevent traffic on your sensitive septic system.

Bio-Microbics, a world leading manufacturer of decentralized wastewater, septic system enhancements and storm water systems products, has developed a system to fit in existing residential septic system designed to enhance or repair ones that have biologically failed.

RetroFAST® systems are designed for residential strength wastewater in 3 specific sizes designed to fix or prevent soggy lawns, foul odors and plumbing backups. The RetroFAST system inserts into an existing manhole (16" – 18") without the need for heavy equipment. The installation can be accomplished in about half a day, without disrupting landscaping with expensive digging.

USEPA ETV-tested, it provides a simple upgrade to a conventional system. The proven Fixed

Integrated Treatment Technology (FITT®) is one of the best methods of treatment for advanced wastewater treatment systems.

It can also be installed in new installations where sites and regulations allow. It is designed to deliver high levels of treatment (from day one) to help ensure the clogging layers never form. The RetroFAST system constantly provides dissolved oxygen (DO) rich effluent into the drain/leach field.

RetroFAST systems come with Bio-Microbics' exclusive S.O.S. – Save Our Septic – warranty program. If after one year from time of the startup date the RetroFAST system does not eliminate the symptoms, the property owner is entitled to a full refund for the equipment.

It is a very cost effective solution that meets environmental standards with long term results. Cost varies, depending upon individual septic systems. But for many homeowners, the cost of the equipment is under \$2,000. It may qualify for certain green certifications in your area.

Bio-Microbics' RetroFAST system is an effective and environmentally sound alternative to replacing an entire septic system at a fraction of the cost.

About the sponsor: For over 35 years Bio-Microbics, located in Shawnee, Kansas, has a real world operating history with more than 42,000 installations in over 60 countries. Through a worldwide distributor network, Bio-Microbics has been recognized as a leader in exporting decentralized equipment with receiving the 2011 KS Exporter of the Year Award and the 2012 President's "E" Award for Excellence in Exports. For more information and testimonial application videos, visit www.biomicrobics.com.