

10 Ways to Conserve Soil

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To help reduce your environmental impact, consider implementing one or more of these tips for 10 ways to conserve soil. Soil erosion removes the topsoil that contains precious nutrients, organic matter, and micro-organisms essential to the viability of arable land. Taking steps to preserve soil is an important part of following an environmentally responsible lifestyle.

Effects of Soil Erosion

While it may be easy to dismiss the importance of dirt, it's a fact that soil is vital to humankind. Over 99 percent of human foods come from the earth. Soil loss can have catastrophic consequences. A 2006 study in the *Journal of the Environment* (v.8 (1): pg. 119-137), *Development and Sustainability*, reported that the United States is losing soil 10 times faster than it can be replaced through natural processes.

The loss of soil translates into serious economic losses. The 2006 study further estimated that soil erosion costs the United States over \$37 billion each year in productivity losses. Unfortunately, most of the soil ends up in aquatic resources, bringing with it the pesticides and fertilizers used on agricultural lands.

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The task in finding ways to stop soil erosion becomes one of finding ways to conserve soil. There are several methods of soil conservation that can be achieved through agricultural practices and measures you take at home.

Agriculture Soil Conservation

- 1. Practice no till farming.** With no till farming, crops are allowed to remain rather than being plowed under at the end of the season. This practice keeps soils anchored in place rather than having bare ground exposed to wind and water.
- 2. Use terrace farming.** This type of farming uses the topography of the land to slow water flow through a series of terraces. This manipulation of the water flow prevents it from gathering speed and washing soil away from farmlands.
- 3. Practice contour farming.** Contour farming replicates the effects of terrace farming, but on a smaller scale. Rather than planting crops in straight vertical rows, crops are planted following the contour of the landscape. Crops planted up and down hillsides create pathways for water to flow. Crops planted parallel to the land slow the flow of water that prevents soil erosion.

Home Methods

- 4. Reduce impervious surfaces.** Impervious surfaces like driveways and patios allow precipitation to flow freely over them. Water flow gains momentum when moving over such surfaces and can then erode stream banks and lakeshores. A good compromise is to use paving stones rather than a concrete slab for your patio to allow the water to percolate down into the soil.
- 5. Plant a rain garden.** A rain garden is a shallow depression in your yard, which will collect precipitation washing over impervious surfaces. It prevents soil erosion and gives you an opportunity to grow wetland plants.
- 6. Use a rain barrel.** You can place a rain barrel underneath a downspout to collect the water that runs off of your roof. Your roof, after all, is another impervious surface. You can use the water you collect for your lawn and garden. In this way, you can [conserve water](#) and soil.

Resource Planning

7. Plant windbreaks. Windbreaks prevent soil erosion by slowing the force of the wind over open ground. You can plant trees or shrubs in your windbreak. In addition to preventing erosion, these plantings will prevent snow from drifting onto your driveway or into the road. They can also protect your home from wind damage.

8. Restore wetlands. Wetlands are one of the most effective ways to prevent soil erosion. Wetlands act as natural sponges, absorbing rainwater and preventing it from carrying the soil away. They also provide a habitat for birds and other wildlife and help prevent [water pollution](#).

9. Plant buffer strips along stream banks. Buffer strips help hold stream banks intact during times of flooding. They also prevent runoff from entering waterways. Buffer strips can include a mixture of grasses, shrubs, and trees.

10. Re-establish forest cover. The [re-establishment of forest cover](#) provides an extensive, tree-root network that offers a long-term solution to soil erosion. It can function both as a windbreak and a means to anchor soils in place.

Any of these 10 ways to conserve soil will help protect this important natural resource and provide a solution for one of the most important environmental issues. Once you begin using soil conservation methods, you'll no longer look at soil as mere dirt.