TIPS ON PROTECTING YOUR **SOIL**
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TIPS ON PROTECTING YOUR SOIL

IN YOUR BACKYARD

It is not hard to help conserve soil in your own backyard. The first step is recognizing areas that are prone to erosion. You should look for:

- areas where no plants are growing along property lines, walkways and drives.

- sloped areas where gullies are forming from water runoff.

- exposed soil around houses and downspouts.

Other signs of soil erosion are dust in the air on windy days, and mud in gutters and on sidewalks. These factors indicate that soil is eroding from surrounding areas.

Once you have identified the problem areas, consider these ways in which you can help curb erosion:

- Seed exposed areas with grass, or plant some other groundcover. After seeding, spread a mulch (such as straw or compost) over the area to help keep the seeds moist and in place until they germinate. On steeper slopes you should cover the mulch with burlap netting for extra protection.

- Build steps, made of logs or old railroad ties, on areas with steep slopes to help prevent increased erosion. Between the steps, spread a thick layer of wood chips to protect the soil**.**

- Put splash guards on downspouts to help reduce erosion around the foundation of your home.

- Plant windbreaks of trees or shrubs to reduce soil loss from blowing wind and also to provide habitat and shelter for wildlife.

- Contact your local resource agencies, such as the Forest Service, parks and recreation, Extension Service, or Soil Conservation Service, for technical assistance and advice in devising an appropriate erosion control plan for your backyard.

IN YOUR GARDEN

Here are some soil-wise ideas that will help keep your garden healthy and productive:

- If your garden is on a slope, plant the vegetable rows along the contour, rather than up and down the slope. This will help slow down water runoff and decrease the rate of soil erosion.

- Plant different crops in different places in your garden each year. For example, a plot used for growing tomatoes one year is used for planting beans the following year. Rotating crops balances the uptake of valuable nutrients from the soil and keeps your plants strong and healthy.

- Spread mulch around your garden plants using compost or grass clippings to help reduce erosion, keep moisture in the soil**,** suppress weed growth, and add nutrients.

- A good way to create a mulch and enrich your soil is by making a compost pile. Construct a small bin beside your garden plot to hold the composting material. Fill it with alternating layers of organic material (i.e. grass clippings, dead leaves, and plant stalks and hulls) and garden soil**.** Keep moist and turn the compost pile regularly to aerate it. This helps speed up the natural decaying process. A good compost will create a rich fertile mulch for your garden.

- Minimize the spraying of poisonous insecticide in your garden, by letting certain types of plants and insect-eating animals control pests. Some plants, such as marigolds and onions, contain chemicals that repel pesty bugs. Toads, ladybugs, praying mantises, and other insect-eating animals can also help control pest populations in your garden.

THINK ABOUT IT

Soil is more than just dirt. Pick up a handful of soil and imagine it is the earth's surface. Right away, remove three- fourths of the handful and drop it back on the ground--that's how much of the earth is covered by oceans, rivers, and lakes. What's left represents the land. Now, drop one-half of the soil in your hand to account for desert regions, glacial poles, and mountain peaks where many things won't grow. Then drop one-tenth to account for the places where people live--where the land is used for big cities, towns, houses, schools, roads, and parking lots.

Now, look. What's left in your hand represents all the soil we have to support life on earth. This soil is trickling through our fingers at an alarming rate due to unchecked erosion. In fact, recent statistics indicate the U.S. is losing 6.4 billion tons of soil each year due to erosion. This amount of soil would fill 320 million dump trucks, which if parked end-to-end would extend to the moon and three-quarters of the way back. The eroding soil is washed into lakes and rivers and blown into our air where it pollutes our environment. If we knew a little bit more about soil**,** we could each do our part to help conserve this precious resource. Read on for some fascinating facts and conservation tips about soil**.**

SOIL FACTS

- Soil makes up the outermost layer of our planet.

- Topsoil is the most productive soil layer. It has varying amounts of organic matter (living and dead organisms), minerals and nutrients.

- Five tons of topsoil spread over an acre is as thick as a dime.

- Natural processes can take 500 years to form one inch of top soil.

- Soil scientists have identified over 70,000 kinds of soil in the United States.

- Soil is formed from rocks and decaying plants and animals.

- An average soil sample is 45% minerals, 25% water, 25% air, and 5% organic matter.

- Different sized mineral particles, such as sand, silt, and clay, give soil texture.

- Lichens help to break apart rocks to form soil.

- Fungi and bacteria help break down organic matter in the soil.

- Plant roots break up rocks, which become part of new soil.

- Roots loosen the soil and allow oxygen to penetrate. This is beneficial to the animals living in the soil.

- Roots hold soil together and help prevent erosion.

- Five to ten tons of animal life can live in an acre of soil.

- Earthworms digest organic matter, recycle nutrients, and make the surface soil richer.

- One earthworm can digest 36 tons of soil in one year.

- Mice take seeds and other plant materials into their underground burrows, where this material eventually decays and becomes part of the soil.

- Mice, moles, and shrews dig burrows which help aerate the soil.

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