



MISSOURI BROWN BILLION

What's your topsoil worth?

You mean you don't know?
It's only one of the most valuable things on Earth!

Topsoil is the outermost layer of the earth.

Usually less than a foot deep, topsoil contains the nutrients and other qualities necessary to grow plants.

The plants feed animals and people, and they clean the air. The soil and plants also filter impurities from our water.



If you scrape it up and sell it

by the truckload to people in urban areas, the value of topsoil is easy to determine. The going rate for a 15-cubic-yard truckload of topsoil varies from about \$70 in Cape Girardeau to about \$430 in St. Louis.



Soil erosion claims 75.5 million tons of Missouri's topsoil each year, mostly from the state's 10.5 million acres of cultivated cropland. That would fill 5 million of those 15-cubic-yard trucks. If they were parked end-to-end, that line of trucks would nearly stretch around the earth.

Using the prices above, the topsoil that erodes each year in Missouri is worth between \$350 million if sold in Cape Girardeau and \$2.1 billion if sold in St. Louis.

One Boone County landowner paid for the materials and labor needed to construct a 16-acre lake by selling the topsoil that was removed from the site. In effect, he traded topsoil for a lake.

Is the cost of erosion too high?

The average amount of topsoil that erodes every year from each acre of Missouri cropland is 5.6 tons, or about 100 bushels. Therefore, if a cornfield yields 100 bushels per acre, we sacrifice one bushel of soil to produce one bushel of corn. Growing a crop without guarding against erosion is like mining topsoil.

In the long run, that's a tradeoff that we can't afford. It takes about 500 years for nature to create one inch of topsoil. But with an erosion rate of 5.6 tons per acre, an inch of topsoil (about 160 tons) erodes in less than 30 years.

So, what is topsoil really worth?

Perhaps the real value of topsoil cannot be calculated after all. We may not realize the true value of topsoil until there is not enough of it left to grow food for an increasing population. How much is topsoil worth? In terms of future productivity, it may be priceless.



To learn about reducing soil erosion, contact the Natural Resources Conservation Service office serving your local soil and water conservation district, or find us on the web at: www.mo.nrcs.usda.gov.