

## MUD, MUD, MUD

By Francis D. Hole - An American soil scientist

Mud, mud, mud.  
What a glorious thing is mud!  
Mud, mud, mud.  
What a wonderful thing is mud!

It sticks and stacks, it squeezes through cracks,  
Between your toes goes mud.  
It plops and drops, and oozes and goozes,  
Thick or thin it's Mud!

Mud, mud, mud.  
What a glorious thing is mud!  
Mud, mud, mud.  
What a wonderful thing is mud!

It's mud pie in your eye,  
The cakes it makes are grand.  
It covers your feet, it covers your face,  
Stir it with both hands.

Mud, mud, mud.  
What a glorious thing is mud!  
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Up to your elbows, up to your knees,  
It slips and slops around.  
It's easy to make a chocolate cake,  
Take water and add some ground!

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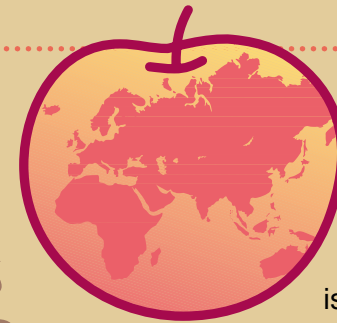
Mud, they say, has a way  
Of changing clean to dirt.  
But after all, you tell them all,  
What can a little dirt hurt?

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## •Futuristic•

Mud is the most futuristic building material. Hi-tech home of the future could be a mud hut. Mud, used with perfect safety to build homes throughout the Third World, is about to be adopted as an alternative to bricks, cement and steel in the developed world. It is low cost – in fact almost free if the earth in the foundations is used; it is environmentally friendly; and it provides a healthier, more energy efficient living space than any other material. When mud is compacted and mixed with a little cement, it can withstand any weather, last a very long time and offers its occupants a constant temperature and humidity. Like always, the inspiration for earth architects working with mud comes from Nature.

## How much soil is there?



Pretend that an apple is the planet Earth, round, beautiful, and full of good things. Notice its skin, hugging and protecting the surface.

Right away, cut the apple in quarters. Toss three quarters away That's how much of the earth is covered with water –

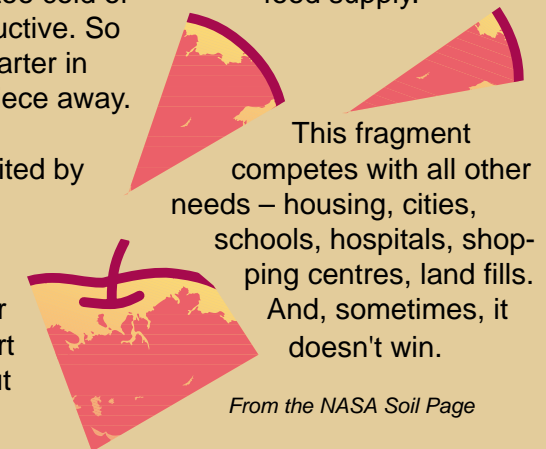
oceans, lakes, rivers, streams. What is left represents the dry land.

50% of that dry land is desert, polar, or mountainous regions where it is too hot, too cold or too high to be productive. So cut that dry land quarter in half and toss one piece away.

40% is severely limited by terrain, fertility or excessive rainfall. It is too rocky, steep, shallow, poor or too wet to support food production. Cut

that portion away.

Peel the skin from the tiny remaining sliver. The remaining 10% – this small fragment of the land area – represents the soil we depend on for the world's food supply.



This fragment competes with all other needs – housing, cities, schools, hospitals, shopping centres, land fills. And, sometimes, it doesn't win.

From the NASA Soil Page

# Termites are the best earth builders

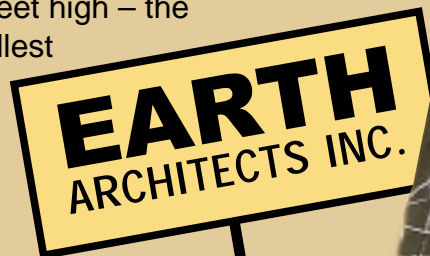
**Air-conditioned.**

**Ventilated.**

**Insulated.**

**Weather-proof.**

Termite mounds are the skyscrapers of the animal world. Some of these mounds are up to 20 feet high – the world's tallest animal mounds!



Most naturally occurring caves incorporate the arch in their structure. Termites use the arch as their main structural element to support a network of ducts and cavities, as described by Lewis Thomas in *The Lives of a Cell*.

....The interiors of the nests are like a three-dimensional maze, intricate arrangements of spiralling galleries, corridors, and arched vaults, ventilated and air conditioned. The fundamental structural unit, on which the whole design is based is the arch.

Termites stabilise the soil with their saliva. The latter is sticky, as it is issued for the digestion of the cellulose, and it binds the grains of soil. This allows them to build such wonders. Termites can also be considered as the best air conditioners. Their hills are meant to regulate temperature and moisture, in order to allow them to live.

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